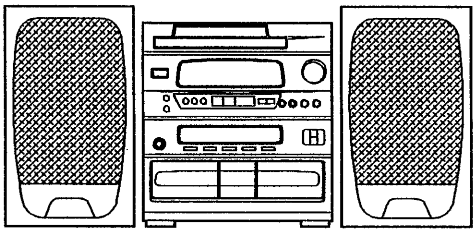
aiwa

aiwa SERVICE

XS-Z1100
CX-Z1100
CX-Z1200
CX-ZAP1



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM–5PR1N
- BASIC CD MECHANISM : KSM–2101ABM

•TYPE: HE,E,K,EZ (1100).
G,LH,EZ (1200),Z (ZAP1)

SERVICE MANUAL

SYSTEM	CD-CASSEIVER	REMOTE CONTROLLER	SPEAKER	TURNTABLE (OPTIONAL)
XS-Z1100	CX-Z1100	RC-TZ1100	SX-Z1100	PX-E900 PX-E750
-	CX-Z1100		SX-Z1100 SX-Z1200	PX-E850
-	CX-Z1200		SX-FZ1200	
-	CX-ZAP1		SX-FZAP1	

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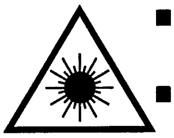
PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION

L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

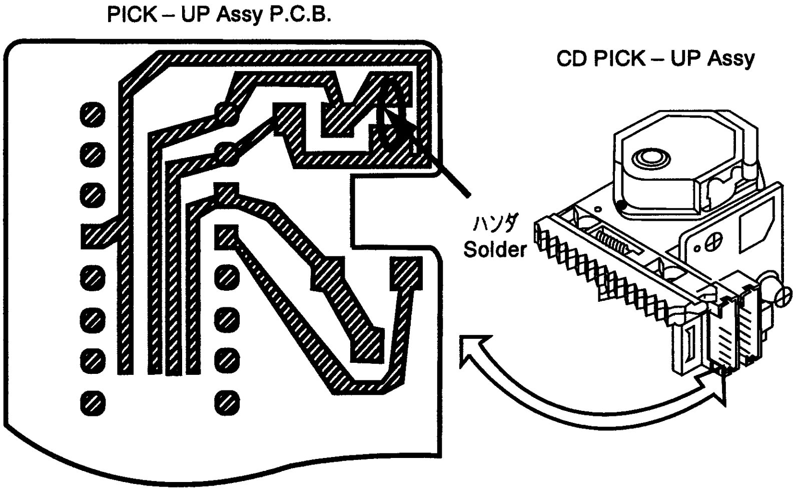
CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

Precaution to replace Optical block

(KSS-210A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use the clothes do not touch the diode.

1) After the connection, remove solder shown in figure below.



SPECIFICATIONS

<FM section>

Frequency range	87.5 MHz to 108 MHz
Usable sensitivity(IHF)	1.3 µV (75 ohms) 13.2 dBf
Alternate channel selectivity	50 dB (±400 kHz)
Signal-to-noise ratio	STEREO: 70 dB MONO: 76 dB
Harmonic distortion	0.3 % (MONO), 1 kHz 0.5 % (STEREO, L-R), 1 kHz
Frequency response	30 Hz to 15 kHz (+0.5 dB,– 3dB)
Stereo separation	33 dB at 1 kHz
Antenna	75 ohms (unbalanced)

<AM (MW) section>

Frequency range	LH:AM 530 (531) kHz to 1710 (1602)kHz HE,G,EE,K,EZ,Z:AM 531 (530) kHz to 1602 (1710)kHz
Usable sensitivity	350 µV/m
Selectivity	22 dB (9 kHz)
Signal-to-noise ratio	53 dB (100 dB input)
Antenna	Loop antenna

<LW Section>
(except HE,G,LH)

Frequency range	144 kHz to 290 kHz
Sensitivity	1400 µV/m
Antenna	Loop antenna

<Timer section>

Program timer	On-timer, free setting
Sleep timer	Setting in 10-minute increments, 240 minutes maximum

<Amplifier section>

Power output	LH,HE,G,K:50 W + 50 W (6 ohms, T.H.D. 10% 1kHz) EE,K,EZ,Z: 30 W + 30 W (6 ohms, T.H.D. 1% 1kHz)
Harmonic distortion	0.05 % (15 W, 1 kHz, 6 ohms)
Input terminal	VIDEO/AUX: 150 mV (adjustable) PHONO: 300 mV MIC: 1.8 mV/10 kΩ
Output terminal	SUPER WOOFER: 1.5 V

<Cassette deck section>

Track format	4 tracks, 2 channels
Frequency response	CrO$_2$ tape: 50 – 16000 Hz Normal tape: 50 –15000 Hz
Signal-to-noise ratio	60 dB (DOLBY NR ON,CrO$_2$ tape peak level)
Tape speed	4.8 cm/sec. (1$^{7}/_{8}$ ips)
Recording system	AC bias
Erasure system	AC erase
Motor	DC servo motor x 1
Heads	Playback head x 1 (deck 1) Recording/playback/erasure head x 1 (deck 2)

<CD player section>

Disc	Compact disc
Scanning method	Non-contact optical scanner (semiconductor laser)
Laser	Semiconductor laser (1 =780 nm)
Rotation speed	Approx. 500 rpm–200 rpm (CLV)
Error correction	Cross Interleave, Reed Solomon code
No. of channels	2 channels
D-A conversion	1-bit linear
Wow/flutter	Unmeasurable
Signal-to-noise ratio	90 dB (1 kHz, 0 dB)
Harmonic distortion	0.05% (1 kHz, 0 dB)

<Speaker system> (HE)
(These values are for one speaker.)

Cabinet type	3 way, bass reflex
Speaker	220 mm (8$^{3}/_{4}$ in.) cone type woofer 60 mm (2 $^{3}/_{8}$ in.) cone type tweeter 30 mm (1$^{3}/_{16}$ in.) ceramic type super tweeter
Impedance	6 ohms
Music power	60 W
Output sound pressure level	90 dB/W/m
Dimensions (W x H x D)	260 x 434x 215 mm (10$^{1}/_{4}$ x 17$^{1}/_{8}$ x 8$^{1}/_{4}$ in.)
Weight	4.4 kg (9.7 lbs.)

<Speaker system> (G,LH,EZ,Z)
(These values are for one speaker.)

Cabinet type	4 way, bass reflex with surround speaker.
Speaker	220 mm (8 $^{3}/_{4}$ in.) cone type woofer 80 mm (3$^{1}/_{4}$ in.) cone type mid range 50 mm (2 in.) ceramic type tweeter 20 mm ($^{13}/_{16}$in) ceramic type super tweeter 80 mm (3$^{1}/_{4}$in) surround speaker
Impedance	6 ohms Surround speaker :16 ohms
Music power	60 W (Surround speaker :20 W)
Output sound pressure level	90 dB/W/m
Dimensions (W x H x D)	260 x 434x 280 mm (10$^{1}/_{4}$ x 17$^{1}/_{8}$ x 11$^{1}/_{8}$ in.)
Weight	5.4 kg (11lbs.14 oz)

<Speaker system> (EE,K,EZ)
(These values are for one speaker.)

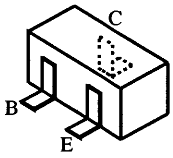
Cabinet type	2 way, bass reflex
Speaker	170 mm (6$^{3}/_{4}$ in.) cone type woofer 60 mm (2 $^{3}/_{8}$ in.) cone type tweeter
Impedance	6 ohms
Music power	45 W
Output sound pressure level	89 dB/W/m
Dimensions (W x H x D)	260 x 434x 190 mm (10$^{1}/_{4}$ x 17$^{1}/_{8}$ x 7$^{1}/_{2}$ in.)
Weight	4.4 kg (9.7 lbs.)

<Common section>

Power requirements	LH,HE:AC 120 V/220 V/240 V, switch-able 50/60 Hz G,EE,EZ,Z:AC 230 V, 50Hz K:AC 230 V-240 V, 50Hz
Power consumption (System total)	HE,LH: 105 W G,EE,K,EZ: 230 W
Dimensions (W x H x D)	Main unit: 360 x 380.5 x 328 mm (14$^{1}/_{4}$ x 15 x 13 in.) System : 880 x 434 x 328 mm (34$^{3}/_{4}$ x 17$^{1}/_{8}$ x 13 in.)
Weight	Main unit: 9.1kg (20 lbs.) (LH,HE model) 9 kg (19.8 lbs) (EE,K,EZ,Z model) System: 17.9 kg (39.4 lbs.) (HE model) 19.9 kg (43.78 lbs.) (LH,G,EZ,Zmodel) 19.8 kg (43.56lbs.) (EE,K,EZ model)

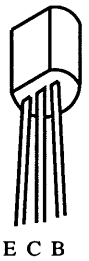
- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound, Inc.

TRANSISTORS ILLUSTRATION

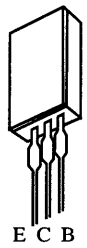


2SA1162
2SC1623
2SC2712
2SC3326
2SC2714
2SK543
2SK302
2SK211

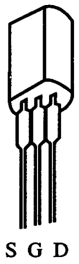
DTA114TK
DTA143EK
DTA144EK
DTA144WK
DTC114YK
DTC144EK
DTC143XK



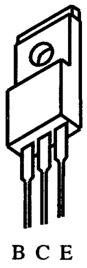
2SA1296
2SA952
2SA1015
2SA1318
2SC3331
2SC1815
2SC3266
2SD655
KTA1266
KTC3198
2SA933S
2SC1740



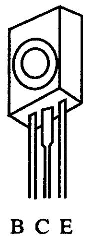
2SK365
DTA114YS



2SK246



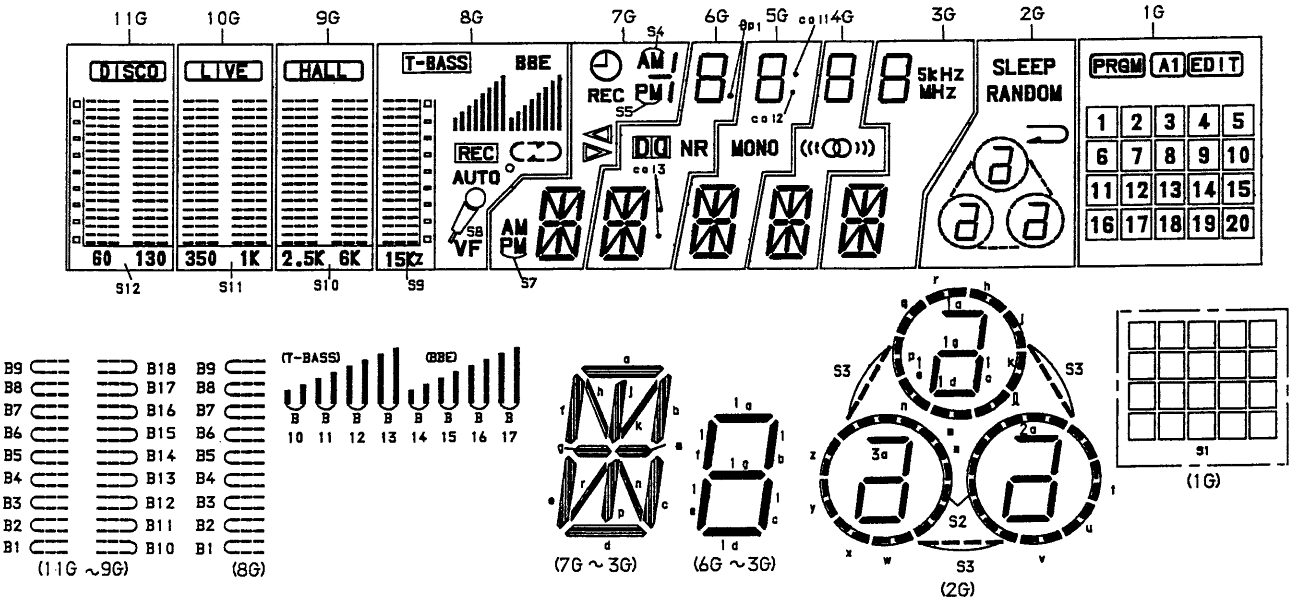
2SB1370



2SB1329

FL (BJ279GK) GRID ASSIGNMENT / ANODE CONNECTION

GRID ASSIGMENT



ANODE CONNECTION

	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	B10	B10	B10	(	d	d	d	d	d	s, t, w, x	**20**
P2	B1	B1	B1	B1	j ,p	j ,p	j ,p	j , p	j , p	u, v, y, z	**19**
P3	B11	B11	B11	S8	n	n	n	n	n	3e	**18**
P4	B2	B2	B2	B2	r	r	r	r	r	3c	**17**
P5	B12	B12	B12	)	c	c	c	c	c	3a,3d,3g	**16**
P6	B3	B3	B3	B3	e	e	e	e	e	3b	**15**
P7	B13	B13	B13	o	m	m	m	m	m	2e	**14**
P8	B4	B4	B4	B4	g	g	g	g	g	2c	**13**
P9	B5	B5	B5	B5	f	f	f	f	f	2a,2d,2g	**11**
P10	B15	B15	B15	**AUTO**	b	b	b	b	b	S3	**10**
P11	B6	B6	B6	B6	k	k	k	k	k	j, m, q	**9**
P12	B16	B16	B16	B10	h	h	h	h	h	h, l, p	**8**
P13	B7	B7	B7	B7	a	a	a	a	a	k, n . r	**7**
P14	B14	B14	B14	**REC**	S7	co 13	co 11	–	**KH**z	2b	**12**
P15	B17	B17	B17	B11	S6	**DD NR**	**MONO**	**(((○○)))**	**5**	1e	**6**
P16	B8	B8	B8	B8	▷	Dp1	co 12	–	**MH**z	1a,1d,1g	**5**
P17	B18	B18	B18	B12	◁	1d	1d	1d	1d	1c	**4**
P18	B9	B9	B9	B9	**REC**	1e	1e	1e	1e	1b	**3**
P19	▭	▭	▭	B13	S5	1c	1c	1c	1c	–	**2**
P20	–	–	–	B14	—	1g	1g	1g	1g	S2	**1**
P21	–	–	–	B15	/	1f	1f	1f	1f	↩	**EDIT**
P22	–	–	–	B16	◷	1b	1b	1b	1b	**SLEEP**	**AI**
P23	**DISCO**	**LIVE**	**HALL**	B17	S4	1a	1a	1a	1a	**RANDOM**	**PRGM**
P24	S12	S11	S10	S9 ⇌	–	–	–	–	–	–	S1
P25	–	–	–	**BBE**	–	–	–	–	–	–	–

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-020-454-019		IC DN 6851
	87-017-745-010		IC,CXA1782BQ
	87-017-486-089		IC,BA6397FP
	87-017-586-010		IC,CXD2518Q
	87-017-194-010		IC,PLT104
	87-017-585-089		IC,NJM4580E
	87-017-941-019		IC,SPS422-1 H
	87-020-966-019		IC STK4142-MK2<EE,K,EZ,Z>
	87-001-582-019		IC,STK4152-2<HE,G,LH>
	87-017-738-019		IC,NJM2068LD
	87-001-982-019		IC,TA7291S
	87-017-887-010		IC,XR1090 ACP
	87-002-901-089		IC,BU4094 BF
	87-002-727-019		IC,NJM4558L
	87-002-872-080		IC,MC14053 BF
	87-001-874-019		IC,HA12134A
	87-017-673-019		IC,BA3837
	87-017-449-010		IC,XR-C1071CP
	87-002-444-019		IC,BU4094B
	87-017-888-089		IC,NJM4558MD
	87-002-247-019		IC,BU4052B
	87-001-376-010		IC,LC7218
	87-002-967-089		IC,BU4052
	87-001-607-089		IC,NJM4558L
	87-017-714-019		IC,LA1836
	87-001-530-010		IC,LA3607
	87-001-528-010		IC,LC7522
	87-017-309-010		IC,M65830P
	84-MA1-652-010		IC,LC866432V-5586
TRANSISTOR			
	89-110-154-089		TR,2SA1015Y
	89-113-187-889		TR,2SA 1318 TU
	87-026-233-089		C-TR,DTA114TK
	87-026-211-089		C-TR,DTA144EK
	89-316-236-089		TR,2SC1623 L6
	89-213-702-019		TR,2SB1370E
	87-026-609-089		TR,KTA1266GR
	89-332-665-089		TR,2SC3266GR
	87-026-610-089		TR,KTC3198GR
	89-111-625-089		C-TR,2SA1162GR
	89-333-266-089		C-TR,2SC3326B
	87-026-232-089		C-TR,DTA144WK
	87-026-210-089		C-TR,DTC144EK T147
	89-213-293-089		TR,2SB1329R (T105)<HE,G,LH>
	89-318-154-089		TR,2SC1815Y
	89-333-317-089		TR,2SC3331T
	89-406-555-089		TR,2SD655E
	87-026-213-089		C-TR,DTC114YK
	87-026-226-089		C-TR,DTA143EK
	89-503-655-089		TR,FET 2SK365 GR,BL
	89-113-187-089		TR,2SA1318TU
	89-327-126-089		C-TR,2SC2712BL<EE,K,EZ,Z>
	87-026-224-089		C-TR,DTC143XK
	89-109-521-089		TR,2SA952K
	89-112-965-089		TR,2SA1296GR
	89-502-464-089		FET,2SK246Y
	87-026-214-089		TR,DTA114YS
	89-327-143-089		C-TR,2SC2714 (O)
	89-503-025-089		C-FET,2SK302 GR
	89-502-115-089		C-FET,2SK211GR<EE,K,EZ,Z>
	89-505-434-589		C-FET,2SK543(4/5)
	87-026-463-089		TR,2SA933S
DIODE			
	87-002-564-089		DIODE 1SS133
	87-020-027-089		C-DIODE,1SS184
	87-002-225-019		DIODE DBF 40C-K10
	87-017-011-089		DIODE LT IN4003L
	87-020-691-089		DIODE,1SS132
	87-020-125-089		C-DIODE,1SS181
	87-020-465-089		DIODE,1SS133
	87-027-385-089		ZENER,HZ11A3L(TA)
	87-017-147-089		ZENER,HZS33-2
	87-027-702-089		ZENER,HZ6C2L
	87-020-331-089		C-DIODE,DAN202K
	87-027-332-089		ZENER,HZ6B1L
	87-020-330-089		C-DIODE,DAP202K
	87-001-559-089		DIODE 1SS131(T-72)
	87-001-290-089		ZENER,HZS6B1L
	87-027-393-089		ZENER,HZ4C2
	87-002-730-089		VARI-CAP SVC203SPA
	87-017-091-089		ZENER,HZS5C1
MAIN C.B			
BPF831	87-030-105-010		FLTR,BPMB6A<EE,K,EZ,Z>
C101	87-016-055-099		CAP-E 3300-42
C102	87-016-055-099		CAP-E 3300-42
C103	87-010-390-019		CAP,E 3300-25 SME
C104	87-010-235-919		CAP,E 470-16 SME
C105	87-010-381-089		CAP,E 330-16 SME
C106	87-010-764-089		CAP,E 47-63V
C107	87-010-392-089		CAP,E 33-35 SME
C108	87-010-406-089		CAP,E 22-50 SME
C109	87-010-263-089		CAP,E 100-10 SME 5X11
C112	87-010-237-919		CAP,E 1000-16
C113	87-010-403-089		CAP,E 3.3-50 SME
C114	87-016-247-089		C-CAP,0.1-50 F<EE,K,EZ,Z>
C115	87-016-247-089		C-CAP,0.1-50 F
C116	87-012-140-089		C-CAP,S 470P-50 CH
C117	87-016-247-089		C-CAP,0.1-50 F<EE,K,EZ,Z>
C118	87-016-247-089		C-CAP,0.1-50 F
C119	87-018-205-089		CAP,TC-U 0.022-25 F
C120	87-018-205-089		CAP,TC-U 0.022-25 F
C122	87-015-785-089		C-CAP,0.1-25 F
C152	87-010-374-089		CAP,E 47-10
C201	87-012-369-089		C-CAP,S0.047-50F<EE,K,EZ,Z>
C202	87-018-208-089		CAP,TC-U0.04750F<EE,K,EZ,Z>
C213	87-010-404-089		CAP,E 4.7-50 SME
C214	87-010-404-089		CAP,E 4.7-50 SME
C215	87-010-182-089		C-CAP,S 2200P-50 B
C216	87-010-182-089		C-CAP,S 2200P-50 B
C217	87-010-404-089		CAP,E 4.7-50 SME
C218	87-010-404-089		CAP,E 4.7-50 SME
C219	87-010-185-089		C-CAP,S 3900P-50 B
C220	87-010-185-089		C-CAP,S 3900P-50 B
C221	87-010-400-089		CAP,E 0.47-50 SME
C222	87-010-400-089		CAP,E 0.47-50 SME
C223	87-010-260-089		CAP,E 47-25 SME
C224	87-010-260-089		CAP,E 47-25 SME
C225	87-010-260-089		CAP,E 47-25 SME
C226	87-010-260-089		CAP,E 47-25 SME
C227	87-012-368-089		C-CAP S 0.1-50F
C228	87-012-368-089		C-CAP S 0.1-50F
C229	87-012-361-089		C-CAP,S 0.056-25 Y
C230	87-012-361-089		C-CAP,S 0.056-25 Y
C236	87-010-408-089		CAP,E 47-50 SME
C237	87-012-368-089		C-CAP S 0.1-50F<EE,K,EZ,Z>
C238	87-012-368-089		C-CAP S 0.1-50F<EE,K,EZ,Z>
C243	87-010-154-089		C-CAP,S 10P-50 CH
C244	87-010-154-089		C-CAP,S 10P-50 CH
C245	87-010-194-089		C-CAP,S 0.047-25 F
C250	87-010-196-089		C-CAP,S 0.1-25 F
C303	87-012-155-089		C-CAP,S 180P-50 CH
C304	87-012-155-089		C-CAP,S 180P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C305	87-010-189-089		C-CAP,S 8200P-50 B
C306	87-010-189-089		C-CAP,S 8200P-50 B
C309	87-010-197-089		C-CAP,S 0.01-25B
C310	87-010-197-089		C-CAP,S 0.01-25B
C311	87-010-213-089		C-CAP,S 0.015-25B
C312	87-010-213-089		C-CAP,S 0.015-25B
C313	87-012-368-089		C-CAP S 0.1-50F
C351	87-012-154-089		C-CAP,S 150P-50CH
C352	87-012-154-089		C-CAP,S 150P-50CH
C353	87-012-145-089		C-CAP S 270P-50CH
C354	87-012-145-089		C-CAP S 270P-50CH
C355	87-012-154-089		C-CAP,S 150P-50CH
C356	87-012-154-089		C-CAP,S 150P-50CH
C357	87-010-189-089		C-CAP,S 8200P-50B
C358	87-010-189-089		C-CAP,S 8200P-50B
C361	87-010-197-089		C-CAP,S 0.01-25B
C362	87-010-197-089		C-CAP,S 0.01-25B
C363	87-010-197-089		C-CAP,S 0.01-25B
C364	87-010-197-089		C-CAP,S 0.01-25B
C365	87-010-197-089		C-CAP,S 0.01-25B<EE,K,EZ,Z>
C366	87-010-197-089		C-CAP,S 0.01-25B<EE,K,EZ,Z>
C401	87-010-402-089		CAP,E 2.2-50 SME
C402	87-010-402-089		CAP,E 2.2-50 SME
C405	87-010-197-089		C-CAP,S 0.01-25 B
C406	87-010-197-089		C-CAP,S 0.01-25 B
C409	87-010-181-089		C-CAP,S 1800P-50 B
C410	87-010-181-089		C-CAP,S 1800P-50 B
C411	87-010-188-089		C-CAP,S 6800P-50 B
C412	87-010-188-089		C-CAP,S 6800P-50 B
C415	87-012-154-089		C-CAP,S 150P-50 CH
C416	87-012-154-089		C-CAP,S 150P-50 CH
C451	87-012-156-089		C-CAP,S 220P-50 CH
C452	87-012-156-089		C-CAP,S 220P-50 CH
C453	87-010-178-089		C-CAP,S 1000P-50 B
C454	87-010-178-089		C-CAP,S 1000P-50B<EE,K,EZ,Z>
C455	87-010-178-089		C-CAP,S 1000P-50B<EE,K,EZ,Z>
C456	87-010-260-089		CAP,E 47-25 SME
C457	87-010-197-089		C-CAP,S 0.01-25 B
C458	87-010-183-089		C-CAP,S 2700P-50 B
C459	87-010-183-089		C-CAP,S 2700P-50 B
C460	87-010-183-089		C-CAP,S 2700P-50 B
C470	87-010-196-089		C-CAP,S 0.1-25 F
C501	87-010-196-089		C-CAP,S 0.1-25 F
C502	87-010-196-089		C-CAP,S 0.1-25 F
C503	87-012-155-089		C-CAP,S 180P-50 CH
C504	87-012-155-089		C-CAP,S 180P-50 CH
C507	87-010-178-089		C-CAP,S 1000P-50 B
C508	87-010-178-089		C-CAP,S 1000P-50 B
C509	87-010-371-089		CAP,E 470-6.3
C515	87-010-545-089		CAP,E 0.22-50 SME
C516	87-010-545-089		CAP,E 0.22-50 SME
C517	87-012-142-089		C-CAP,S 0.33-16 F
C518	87-012-142-089		C-CAP,S 0.33-16 F
C519	87-010-196-089		C-CAP,S 0.1-25 F
C520	87-010-197-089		C-CAP,S 0.01-25B<EE,K,EZ,Z>
C521	87-010-197-089		C-CAP,S 0.01-25
C522	87-010-318-089		C-CAP,S 47P-50 CH
C523	87-010-197-089		C-CAP,S 0.01-25 B
C524	87-010-402-089		CAP,E 2.2-50 SME
C525	87-010-322-089		C-CAP,S 100P-50CH<EE,K,EZ,Z>
C526	87-010-322-089		C-CAP,S 100P-50CH<EE,K,EZ,Z>
C530	87-010-194-089		C-CAP,S 0.047-25 F
C531	87-010-545-089		CAP,E 0.22-50 SME
C532	87-010-382-089		CAP,E 22-25 SME
C533	87-010-404-089		CAP,E 4.7-50 SME
C534	87-010-404-089		CAP,E 4.7-50 SME
C535	87-010-404-089		CAP,E 4.7-50 SME
C536	87-010-404-089		CAP,E 4.7-50 SME
C537	87-010-196-089		C-CAP,S 0.1-25 F

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C538	87-010-196-089		C-CAP,S 0.1-25 F
C540	87-010-260-089		CAP,E 47-25 SME
C541	87-010-196-089		C-CAP,S 0.1-25 F
C543	87-010-546-089		CAP,E 0.33-50 SME
C544	87-010-546-089		CAP,E 0.33-50 SME
C547	87-010-198-089		C-CAP,S0.022-25B<HE,G,LH>
C547	87-010-193-089		C-CAP,S0.033-25F<EE,K,EZ,Z>
C548	87-010-198-089		C-CAP,S 0.022-25 B<HE,G,LH>
C548	87-010-193-089		C-CAP,S 0.033-25 F<EE,K,EZ,Z>
C551	87-010-404-089		CAP,E 4.7-50 SME
C552	87-010-404-089		CAP,E 4.7-50 SME
C560	87-016-081-089		C-CAP,S 0.1-16 RK
C561	87-016-081-089		C-CAP,S 0.1-16 RK
C601	87-010-401-089		CAP,E 1-50 SME
C602	87-010-405-089		CAP,E 10-50 SME
C603	87-010-101-089		CAP,E 220-16 SME
C605	87-015-627-089		C-CAP,1000P-50 B
C606	87-015-627-089		C-CAP,1000P-50 B
C607	87-010-404-089		CAP,E 4.7-50 SME
C608	87-010-404-089		CAP,E 4.7-50 SME
C609	87-010-404-089		CAP,E 4.7-50 SME
C610	87-010-404-089		CAP,E 4.7-50 SME
C611	87-010-177-089		C-CAP,S 820P-50 SL
C612	87-010-177-089		C-CAP,S 820P-50 SL
C613	87-010-404-089		CAP,E 4.7-50 SME
C614	87-010-404-089		CAP,E 4.7-50 SME
C615	87-010-400-089		CAP,E 0.47-50 SME
C616	87-010-400-089		CAP,E 0.47-50 SME
C617	87-010-197-089		C-CAP,S 0.01-25 B
C618	87-010-197-089		C-CAP,S 0.01-25 B
C619	87-010-184-089		C-CAP,S 3300P-50 B
C620	87-010-184-089		C-CAP,S 3300P-50 B
C621	87-012-155-089		C-CAP,S 180P-50 CH
C622	87-012-155-089		C-CAP,S 180P-50 CH
C623	87-010-405-089		CAP,E 10-50 SME
C624	87-010-405-089		CAP,E 10-50 SME
C630	87-010-405-089		CAP,E 10-50 SME
C631	87-010-401-089		CAP,E 1-50 SME
C640	87-010-196-089		C-CAP,S 0.1-25 F
C641	87-010-196-089		C-CAP,S 0.1-25 F
C645	87-012-142-089		C-CAP,S 0.33-16 F
C646	87-012-142-089		C-CAP,S 0.33-16 F
C647	87-012-142-089		C-CAP,S 0.33-16 F
C648	87-012-142-089		C-CAP,S 0.33-16 F
C701	87-010-381-089		CAP,E 330-16 SME
C702	87-010-404-089		CAP,E 4.7-50 SME
C703	87-010-197-089		C-CAP,S 0.01-25 B
C704	87-010-197-089		C-CAP,S 0.01-25 B
C711	87-010-263-089		CAP,E 100-10 SME 5X11
C712	87-010-196-089		C-CAP,S 0.1-25 F
C722	87-010-151-089		C-CAP,S 7P-50 CH
C723	87-010-178-089		C-CAP,S 1000P-50 B
C724	87-010-178-089		C-CAP,S 1000P-50 B
C725	87-010-178-089		C-CAP,S 1000P-50 B
C726	87-010-178-089		C-CAP,S 1000P-50 B
C727	87-010-194-089		C-CAP,S 0.047-25 F
C728	87-010-248-089		CAP,E 220-10 SME
C732	87-010-197-089		C-CAP,S 0.01-25 B
C771	87-010-405-089		CAP,E 10-50 SME
C772	87-010-194-089		C-CAP,S 0.047-25 F
C773	87-010-196-089		C-CAP,S 0.1-25 F
C774	87-010-263-089		CAP,E 100-10 SME 5X11
C775	87-010-405-089		CAP,E 10-50 SME
C776	87-010-197-089		C-CAP,S 0.01-25 B
C777	87-010-400-089		CAP,E 0.47-50 SME
C778	87-010-401-089		CAP,E 1-50 SME
C779	87-010-401-089		CAP,E 1-50 SME
C780	87-010-197-089		C-CAP,S 0.01-25 B
C781	87-010-405-089		CAP,E 10-50 SME
C782	87-010-405-089		CAP,E 10-50 SME

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C787	87-010-184-089		C-CAP,S 3300P-50 B
C788	87-010-184-089		C-CAP,S 3300P-50 B
C789	87-010-179-089		C-CAP,S 1200P-50 B
C790	87-010-179-089		C-CAP,S 1200P-50 B
C791	87-010-401-089		CAP,E 1-50 SME
C792	87-010-180-089		C-CAP,S 1500P-50 B<HE,G,LH>
C793	87-010-189-089		C-CAP,S 8200P-50 B
C794	87-010-260-089		CAP,E 47-25 SME<EE,K,EZ,Z>
C795	87-010-194-089		C-CAP,S 0.047-25 F
C796	87-010-403-089		CAP,E 3.3-50 SME
C797	87-010-405-089		CAP,E 10-50 SME
C798	87-010-196-089		C-CAP,S 0.1-25 F
C802	87-010-154-089		C-CAP,S 10P-50 CH
C802	87-010-311-089		C-CAP,S 12P-50 CH<EE,K,EZ,Z>
C804	87-010-151-089		C-CAP,S 7P-50 CH<HE,G,LH>
C805	87-010-147-089		C-CAP,S 3P-50 CH<EE,K,EZ,Z>
C805	87-010-150-089		C-CAP,S 6P-50 CH<HE,G,LH>
C806	87-010-148-089		C-CAP,S 4P-50 CH<EE,K,EZ,Z>
C807	87-010-154-089		C-CAP,S 10P-50 CH<HE,G,LH>
C807	87-010-313-089		C-CAP,S 18P-50 CH<EE,K,EZ,Z>
C808	87-010-166-089		C-CAP,S 100P-50 SL<HE,G,LH>
C809	87-010-197-089		C-CAP,S 0.01-25 B
C810	87-010-197-089		C-CAP,S 0.01-25 B
C811	87-010-149-089		C-CAP,S 5P-50 CH
C812	87-010-312-089		C-CAP,S 15P-50 CH
C813	87-010-197-089		C-CAP,S 0.01-25 B<EE,K,EZ,Z>
C814	87-010-197-089		C-CAP,S 0.01-25 B
C816	87-010-197-089		C-CAP,S 0.01-25 B
C817	87-010-197-089		C-CAP,S 0.01-25 B<HE,G,LH>
C818	87-010-197-089		C-CAP,S 0.01-25 B
C819	87-010-197-089		C-CAP,S 0.01-25 B
C820	87-010-260-089		CAP,E 47-25 SME<EE,K,EZ,Z>
C821	87-010-197-089		C-CAP,S 0.01-25 B
C822	87-010-197-089		C-CAP,S 0.01-25 B<HE,G,LH>
C823	87-010-197-089		C-CAP,S 0.01-25 B
C826	87-010-197-089		C-CAP,S 0.01-25 B<EE,K,EZ,Z>
C827	87-010-154-089		C-CAP,S 10P-50 CH<EE,K,EZ,Z>
C827	87-010-145-089		C-CAP,S 1P-50 CH
C830	87-010-197-089		C-CAP,S 0.01-25 B
C830	87-010-260-089		CAP,E 47-25 SME<HE,G,LH>
C831	87-010-154-089		C-CAP,S 10P-50 CH<HE,G,LH>
C832	87-010-314-089		C-CAP,S 22P-50 CH<EE,K,EZ,Z>
C834	87-010-154-089		C-CAP,S 10P-50 CH<EE,K,EZ,Z>
C835	87-010-154-089		C-CAP,S 10P-50 CH<HE,G,LH>
C836	87-010-312-089		C-CAP,S 15P-50 CH
C837	87-010-312-089		C-CAP,S 15P-50 CH
C840	87-010-197-089		C-CAP,S 0.01-25 B
C843	87-010-146-089		C-CAP,S 2P-50 CH
C851	87-010-197-089		C-CAP,S 0.01-25 B
C941	87-010-197-089		C-CAP,S 0.01-25 B<EE,K,EZ,Z>
C942	87-010-311-089		C-CAP,S 12P-50 CH<EE,K,EZ,Z>
C944	87-010-154-089		C-CAP,S 10P-50 CH<EE,K,EZ,Z>
C944	87-010-311-089		C-CAP,S 12P-50 CH<HE,G,LH>
C945	87-014-050-089		CAP,PP 510P-100 J<EE,K,EZ,Z>
C946	87-010-401-089		CAP,E 1-50 SME
C947	87-010-197-089		C-CAP,S 0.01-25 B
C948	87-010-401-089		CAP,E 1-50 SME
C949	87-010-196-089		C-CAP,S 0.1-25 F<EE,K,EZ,Z>
C950	87-010-166-089		C-CAP,S 100P-50 SL<HE,G,LH>
C981	87-018-134-019		CAP,TC-U 0.01-16 Y
C983	87-015-691-089		CAP,E 0.1-50 7L
C984	87-010-196-089		C-CAP,S 0.1-25 F
C985	87-010-196-089		C-CAP,S 0.1-25 F
C987	87-010-197-089		C-CAP,S 0.01-25 B
C988	87-015-785-089		C-CAP,0.1-25 F
C990	87-010-197-089		C-CAP,S 0.01-25 B
CF801	87-008-261-019		FLTR,SFE10.7MA5-A<HE,G,LH>
CF803	82-785-747-019		CF,MS2 GHY,R<EE,K,EZ,Z>
CF803	87-008-261-019		FLTR,SFE10.7MA5-A<HE,G,LH>
J250	87-099-630-019		JACK,6.3(KM)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
J253	87-099-474-019		JACK,PIN 3P BLK<HE,G,LH>
J253	87-099-475-019		JACK,PIN 3P BLK W/E<EE,K,EZ,Z>
J254	87-033-233-019		TERMINAL,SPKR
J652	87-099-625-019		JACK PIN 4P,RVS (KM)
J801	87-033-235-019		TERMINAL,ANT (H)<HE,G,LH>
J801	87-033-230-019		TERMINAL,ANT AJ-2016<EE,K,EZ,Z>
L201	87-005-366-019		COIL,IUH<EE,K,EZ,Z>
L202	87-005-366-019		COIL,IUH<EE,K,EZ,Z>
L401	87-003-131-089		COIL,10MH J
L402	87-003-131-089		COIL,10MH J
L403	82-231-622-089		COIL,22MH-J
L404	82-231-622-089		COIL,22MH-J
L451	87-007-312-019		COIL,OSC BIAS 85K
L701	87-006-235-019		COIL,TRAP MPX
L702	87-006-235-019		COIL,TRAP MPX
L741	87-006-259-019		COIL,FM DET
L742	82-NT1-659-019		FLTR,CFAZ-450 2NT
L770	87-003-102-089		COIL,10UH
L771	87-003-098-089		COIL,2.2UH<HE,G,LH>
L801	87-006-263-019		COIL,ANTFM 3/4TS,L4
L802	87-006-265-019		COIL,ANT FM2-3/4 TS
L803	87-006-262-019		COIL,RF FM3-1/2T,L4
L804	87-006-264-019		COIL,RF FM3-1/2TS,L4
L805	87-003-098-089		COIL,2.2UH
L806	87-006-257-019		COIL,FMIFT
L807	87-006-258-019		COIL,FM OSC
L831	87-006-264-019		COIL,RFFM3-1/2TS,L4<EE,K,EZ,Z>
L832	87-003-098-089		COIL,2.2UH
L941	87-006-261-019		COIL,LW ANT<EE,K,EZ,Z>
L942	87-006-260-019		COIL,LW OSC<EE,K,EZ,Z>
L981	81-MX4-620-019		AM PACK 3,S<HE,G,LH>
L981	87-042-147-019		AM PACK 4<EE,K,EZ,Z>
R105	87-022-050-089		RES METAL 1W-0.22J
R106	87-022-050-089		RES METAL 1W-0.22J
R203	87-022-391-089		RES,M/F 0.47-1W
R204	87-022-391-089		RES,M/F 0.47-1W
R243	87-022-391-089		RES,M/F 0.47-1W
R244	87-022-391-089		RES,M/F 0.47-1W
RY101	87-045-371-019		RELAY AJW5211813
RY102	87-045-335-010		RELAY,G5Z-2A 12VDC<LH,Z>
SFR301	87-024-168-089		SFR, 1K DIA6 V
SFR302	87-024-168-089		SFR, 1K DIA6 V
SFR351	87-024-168-089		SFR, 1K DIA6 V
SFR352	87-024-168-089		SFR, 1K DIA6 V
SFR401	87-024-168-089		SFR, 1K DIA6 V
SFR402	87-024-168-089		SFR, 1K DIA6 V
SFR451	87-024-175-089		SFR,47K DIA6 V
SFR452	87-024-175-089		SFR,47K DIA6 V
SFR722	87-024-651-089		SFR 6.8K DIA6 V
SFR771	87-024-173-089		SFR 22K DIA6 V
TC701	87-011-221-089		TRIMMER.30P VCT51
TC801	87-011-219-089		CAP TRIMMER 10P VCT
TC802	87-011-219-089		CAP TRIMMER 10P VCT
TC803	87-011-219-089		CAP TRIMMER 10P VCT<EE,K,EZ,Z>
TC941	87-011-221-089		TRIMER.30P VCT51<EE,K,EZ,Z>
VR651	82-NF5-660-019		VR 50K BX2 RK14K 12A
W101	84-MA1-683-019		F-CABLE 7P-2.5
X703	84-508-618-019		VIB,CER CSB 456 F/5
X721	87-030-372-019		VIB,XTAL 7.2MHZ

FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C201	87-010-404-049		CAP,E 4.7-50 SME
C202	87-010-404-049		CAP,E 4.7-50 SME
C203	87-010-408-089		CAP,E 47-50 SME
C204	87-010-071-089		CAP,E 1-50 5L
C205	87-010-263-049		CAP,E 100-10
C206	87-010-248-049		CAP,E 220-10 SME
C207	87-010-071-089		CAP,E 1-50 5L
C208	87-010-196-089		C-CAP,S 0.1-25 F

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C212	87-010-405-089		CAP,E 10-50 SME
C213	87-010-196-089		C-CAP,S 0.1-25 F
C214	87-012-140-089		C-CAP,S 470P-50 CH
C215	87-010-196-089		C-CAP,S 0.1-25 F
C216	87-010-196-089		C-CAP,S 0.1-25 F
C218	87-010-452-089		C-CAP,1-16F
C219	87-010-146-089		C-CAP,S 2P-50 CH
C352	87-010-197-089		C-CAP,S 0.01-25 B
C381	87-010-196-089		C-CAP,S 0.1-25 F
C382	87-010-196-089		C-CAP,S 0.1-25 F
C383	87-010-196-089		C-CAP,S 0.1-25 F
C384	87-010-196-089		C-CAP,S 0.1-25 F
C385	87-010-150-089		C-CAP,S 6P-50 CH
C386	87-010-401-049		CAP,E 1-50 SME
C401	87-010-196-089		C-CAP,S 0.1-25 F
C501	87-010-384-089		CAP,E 100-25 SME
C604	87-010-183-089		C-CAP,S 2700P-50 B
C606	87-010-401-089		CAP,E 1-50 SME
C607	87-012-140-089		C-CAP,S 470P-50 CH
C608	87-015-699-089		CAP,E 10-50 7L
C609	87-010-196-089		C-CAP,S 0.1-25 F
C610	87-012-145-089		C-CAP S 270P-50CH
C613	87-010-196-089		C-CAP,S 0.1-25 F
C624	87-010-183-089		C-CAP,S 2700P-50 B
C626	87-010-401-089		CAP,E 1-50 SME
C627	87-012-140-089		C-CAP,S 470P-50 CH
C630	87-010-405-089		CAP,E 10-50 SME
C640	87-010-405-089		CAP,E 10-50 SME
C645	87-010-263-089		CAP,E 100-10 SME 5X11
C691	87-010-322-089		C-CAP,S 100P-50 CH
C692	87-010-322-089		C-CAP,S 100P-50 CH
C693	87-010-197-089		C-CAP,S 0.01-25 B
C803	87-010-404-089		CAP,E 4.7-50 SME
C804	87-010-404-089		CAP,E 4.7-50 SME
C805	87-010-404-089		CAP,E 4.7-50 SME
C806	87-010-404-089		CAP,E 4.7-50 SME
C807	87-010-174-089		C-CAP,S 470P-50 SL
C808	87-010-174-089		C-CAP,S 470P-50 SL
C809	87-010-186-089		C-CAP,S 4700P-50 B
C810	87-010-186-089		C-CAP,S 4700P-50 B
C811	87-010-173-089		C-CAP,S 390P-50 SL
C812	87-010-173-089		C-CAP,S 390P-50 SL
C813	87-010-197-089		C-CAP,S 0.01-25 B
C814	87-010-197-089		C-CAP,S 0.01-25 B
C815	87-010-177-089		C-CAP,S 820P-50 SL
C816	87-010-177-089		C-CAP,S 820P-50 SL
C817	87-010-198-089		C-CAP,S 0.022-25 B
C818	87-010-198-089		C-CAP,S 0.022-25 B
C819	87-010-181-089		C-CAP,S 1800P-50 B
C820	87-010-181-089		C-CAP,S 1800P-50 B
C821	87-010-195-089		C-CAP,S 0.068-25 F
C822	87-010-195-089		C-CAP,S 0.068-25 F
C823	87-010-186-089		C-CAP,S 4700P-50 B
C824	87-010-186-089		C-CAP,S 4700P-50 B
C825	87-010-068-089		CAP,E 0.22-50 5L
C826	87-010-545-089		CAP,E 0.22-50 SME
C827	87-010-213-089		C-CAP,S 0.015-25 B
C828	87-010-213-089		C-CAP,S 0.015-25 B
C829	87-010-070-089		CAP,E 0.47-50 5L
C830	87-010-400-089		CAP,E 0.47-50 SME
C831	87-012-365-089		C-CAP,S 0.027-25V BK
C832	87-012-365-089		C-CAP,S 0.027-25V BK
C833	87-010-071-089		CAP,E 1-50 5L
C834	87-010-401-089		CAP,E 1-50 SME
C835	87-010-196-089		C-CAP,S 0.1-25 F
C836	87-010-196-089		C-CAP,S 0.1-25 F
C837	87-010-382-049		CAP,E 22-25 SME
C838	87-010-404-089		CAP,E 4.7-50 SME
C839	87-010-404-089		CAP,E 4.7-50 SME
C840	87-015-682-089		CAP,E 22-16 7L
C841	87-010-196-089		C-CAP,S 0.1-25 F
C842	87-010-248-089		CAP,E 220-10 SME
C846	87-015-785-089		C-CAP,0.1-25 F
C903	87-010-402-089		CAP,E 2.2-50 SME
C904	87-010-402-089		CAP,E 2.2-50 SME
FL201	84-MA1-651-019		FL,BJ279 GK
J601	87-099-659-019		JACK,6.3 JY-6314-01130
J621	87-099-659-019		JACK,6.3 JY-6314-01130
L301	87-003-149-089		COIL,47UH
LED320	87-017-731-080		LED,SEL1510CM2
LED321	87-017-731-080		LED,SEL1510CM2
LED322	87-017-731-080		LED,SEL1510CM2
LED323	87-017-731-080		LED,SEL1510CM2
LED324	87-002-787-080		LED,SEL 6215S RED
LED325	87-002-787-080		LED,SEL 6215S RED
LED326	87-002-787-080		LED,SEL 6215S RED
LED327	87-002-787-080		LED,SEL 6215S RED
LED401	87-017-960-089		LED,L-1573PGC-TNB 5/5
LED402	87-017-960-089		LED,L-1573PGC-TNB 5/5
LED403	87-017-960-089		LED,L-1573PGC-TNB 5/5
LED404	87-017-960-089		LED,L-1573PGC-TNB 5/5
LED405	87-017-960-089		LED,L-1573PGC-TNB 5/5
LED406	87-017-960-089		LED,L-1573PGC-TNB 5/5
LED407	87-017-731-080		LED,SEL1510CM2
LED408	87-017-731-080		LED,SEL1510CM2
LED409	87-017-731-080		LED,SEL1510CM2
LED410	87-017-731-080		LED,SEL1510CM2
LED411	87-017-731-080		LED,SEL1510CM2
LED412	87-017-731-080		LED,SEL1510CM2
LED413	87-017-731-080		LED,SEL1510CM2
LED414	87-017-731-080		LED,SEL1510CM2
LED415	87-017-731-080		LED,SEL1510CM2
LED416	87-017-731-080		LED,SEL1510CM2
LED420	87-017-785-080		LED,SEL 4214S
LED421	87-017-785-080		LED,SEL 4214S
LED422	87-017-785-080		LED,SEL 4214S
LED423	87-017-785-080		LED,SEL 4214S
LED424	87-017-785-080		LED,SEL 4214S
S301	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S301	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S302	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S302	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S303	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S303	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S304	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S304	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S305	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S305	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S306	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S306	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S307	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S307	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S308	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S308	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S309	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S309	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S310	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S310	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S311	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S311	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S312	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S312	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S313	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S313	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S321	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S321	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S322	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S322	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S323	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S323	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
S324	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S324	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S325	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S325	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S326	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S326	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S327	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S327	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S328	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S328	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S329	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S329	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S330	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S330	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S331	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S331	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S332	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S332	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S341	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S341	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S342	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S342	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S343	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S343	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S344	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S344	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S345	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S345	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S346	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S346	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S347	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S347	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S348	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S348	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S349	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S349	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S350	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S350	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
VR601	83-MA1-661-019		VR,SL 10KB
VR602	87-024-649-019		VR,20KA RK11K1130
VR801	82-MA2-634-019		VR,50KB C.C C.T
W201	84-MA1-692-019		CABLE,FFC 14P 1.25
W801	84-MA1-686-019		F-CABLE, 6P-2.0
X201	87-030-345-080		VIB,CER CST 5.76MGW

CD.CB

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C1	87-010-188-089		C-CAP,S 6800P-50 B
C2	87-010-196-089		C-CAP,S 0.1-25 F
C3	87-010-196-089		C-CAP,S 0.1-25 F
C4	87-010-196-089		C-CAP,S 0.1-25 F
C5	87-010-404-089		CAP,E 4.7-50 SME
C6	87-010-594-089		C-CAP,S 0.033-16 RK
C7	87-010-197-089		C-CAP,S 0.01-25 B
C8	87-010-403-089		CAP,E 3.3-50 SME
C9	87-010-382-089		CAP,E 22-25 SME
C10	87-010-260-089		CAP,E 47-25 SME
C11	87-010-197-089		C-CAP,S 0.01-25 B
C12	87-010-193-089		C-CAP,S 0.033-25 F
C13	87-010-197-089		C-CAP,S 0.01-25 B
C14	87-010-193-089		C-CAP,S 0.033-25 F
C15	87-010-182-089		C-CAP,S 2200P-50 B
C21	87-010-198-089		C-CAP,S 0.022-25 B
C22	87-010-196-089		C-CAP,S 0.1-25 F
C23	87-010-263-089		CAP,E 100-10 SME 5X11
C24	87-010-178-089		C-CAP,S 1000P-50 B
C25	87-010-197-089		C-CAP,S 0.01-25 B
C26	87-010-260-089		CAP,E 47-25 SME
C27	87-010-196-089		C-CAP,S 0.1-25 F
C28	87-010-263-089		CAP,E 100-10 SME 5X11
C29	87-010-197-089		C-CAP,S 0.01-25 B
C30	87-010-196-089		C-CAP,S 0.1-25 F
C31	87-010-193-089		C-CAP,S 0.033-25 F
C33	87-010-196-089		C-CAP,S 0.1-25 F
C34	87-010-197-089		C-CAP,S 0.01-25 B
C35	87-010-381-089		CAP,E 330-16 SME
C36	87-010-196-089		C-CAP,S 0.1-25 F
C37	87-010-260-089		CAP,E 47-25 SME
C38	87-010-197-089		C-CAP,S 0.01-25 B
C39	87-010-260-089		CAP,E 47-25 SME
C40	87-010-197-089		C-CAP,S 0.01-25 B
C41	87-010-146-089		C-CAP,S 2P-50 CH
C42	87-010-154-089		C-CAP,S 10P-50 CH
C45	87-018-214-089		CAP,TC-U 0.1-50F
C101	87-010-194-089		C-CAP,S 0.047-25 F
C102	87-010-180-089		C-CAP,S 1500P-50 B
C103	87-010-263-089		CAP,E 100-10 SME 5X11
C104	87-010-197-089		C-CAP,S 0.01-25 B
C105	87-015-818-089		C-CAP,4700P
C106	87-012-156-089		C-CAP,S 220P-50 CH
C107	87-010-197-089		C-CAP,S 0.01-25 B
C108	87-010-400-089		CAP,E 0.47-50 SME
C112	87-010-154-089		C-CAP,S 10P-50 CH
C113	87-010-154-089		C-CAP,S 10P-50 CH
C114	87-010-314-089		C-CAP,S 22P-50 CH
C115	87-010-404-089		CAP,E 4.7-50 SME
C116	87-010-263-089		CAP,E 100-10 SME 5X11
C117	87-010-194-089		C-CAP,S 0.047-25 F
C118	87-010-154-089		C-CAP,S 10P-50 CH
C120	87-010-263-089		CAP,E 100-10 SME 5X11
C121	87-010-197-089		C-CAP,S 0.01-25 B
C122	87-010-196-089		C-CAP,S 0.1-25 F
C201	87-012-153-089		C-CAP,S 120P-50 CH
C202	87-012-153-089		C-CAP,S 120P-50 CH
C203	87-012-153-089		C-CAP,S 120P-50 CH
C204	87-012-153-089		C-CAP,S 120P-50 CH
C205	87-012-153-089		C-CAP,S 120P-50 CH
C206	87-012-153-089		C-CAP,S 120P-50 CH
C207	87-012-153-089		C-CAP,S 120P-50 CH
C208	87-012-153-089		C-CAP,S 120P-50 CH
C209	87-012-153-089		C-CAP,S 120P-50 CH
C210	87-012-153-089		C-CAP,S 120P-50 CH
C211	87-010-401-089		CAP,E 1-50 SME
C212	87-010-401-089		CAP,E 1-50 SME
C213	87-010-186-089		C-CAP,S 4700P-50 B
C214	87-010-186-089		C-CAP,S 4700P-50 B
C231	87-010-263-089		CAP,E 100-10 SME 5X11
C232	87-010-263-089		CAP,E 100-10 SME 5X11
C301	87-010-178-089		C-CAP,S 1000P-50 B
C304	87-010-197-089		C-CAP,S 0.01-25 B
C305	87-010-260-089		CAP,E 47-25 SME
C306	87-012-141-089		C-CAP,S 0.22-16 F
C307	87-010-178-089		C-CAP,S 1000P-50 B
C308	87-010-178-089		C-CAP,S 1000P-50 B
C340	88-130-399-089		RES,3.9-1/4WJ
L1	87-003-295-089		COIL,10UH
SFR1	87-024-176-089		SFR,100K DIA6 V
SFR2	87-024-173-089		SFR 22K DIA6 V
SFR3	87-024-176-089		SFR,100K DIA6 V
W301	83-NF5-631-019		F-CABLE,6-2.0 300
W501	83-NF5-644-019		F-CABLE 2-2.0-230
X101	87-030-374-019		VIB,XTAL 33.8688 MHZ

DSP C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C735	87-010-402-089		CAP,E 2.2-50 SME
C736	87-010-402-089		CAP,E 2.2-50 SME
C738	87-010-370-089		CAP,E 330-6.3 SME
C741	87-010-192-089		C-CAP,S 0.022-50 F
C745	87-016-073-089		CAP,E 1-50 FX

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C746	87-016-073-089		CAP,E 1-50 FX
C747	87-010-401-089		CAP,E 1-50 SME
C748	87-010-401-089		CAP,E 1-50 SME
C750	87-010-381-089		CAP,E 330-16 SME
C751	87-010-401-089		CAP,E 1-50 SME
C752	87-010-401-089		CAP,E 1-50 SME
C757	87-010-401-089		CAP,E 1-50 SME
C760	87-010-370-089		CAP,E 330-6.3 SME
C761	87-010-318-089		C-CAP,S 47P-50 CH
C762	87-010-318-089		C-CAP,S 47P-50 CH
C766	87-010-401-089		CAP,E 1-50 SME
C773	87-010-400-089		CAP,E 0.47-50 SME
C777	87-010-403-089		CAP,E 3.3-50 SME
C778	87-010-403-089		CAP,E 3.3-50 SME
C797	87-010-401-089		CAP,E 1-50 SME
C901	87-010-248-089		CAP,E 220-10 SME
C902	87-010-384-089		CAP,E 100-25 SME
C903	87-010-186-089		C-CAP,S 4700P-50 B
C904	87-010-322-089		C-CAP,S 100P-50 CH
C905	87-010-401-089		CAP,E 1-50 SME
C906	87-010-187-089		C-CAP,S 5600P-50 B
C907	87-010-193-089		C-CAP,S 0.033-25 F
C908	87-010-544-089		CAP,E 0.1-50
C909	87-010-188-089		C-CAP,S 6800P-50 B
C910	87-012-365-089		C-CAP,S 0.027-25V BK
C911	87-010-263-089		CAP,E 100-10 SME 5X11
C912	87-010-196-089		C-CAP,S 0.1-25 F
C913	87-010-316-089		C-CAP,S 33P-50 CH
C914	87-010-177-089		C-CAP,S 820P-50 SL
C915	87-010-316-089		C-CAP,S 33P-50 CH
C916	87-010-177-089		C-CAP,S 820P-50 SL
C917	87-010-179-089		C-CAP,S 1200P-50 B
C918	87-010-196-089		C-CAP,S 0.1-25 F
C919	87-010-260-089		CAP,E 47-25 SME
C920	87-010-070-089		CAP,E 0.47-50 5L
C921	87-010-070-089		CAP,E 0.47-50 5L
C922	87-010-196-089		C-CAP,S 0.1-25 F
C923	87-010-187-089		C-CAP,S 5600P-50 B
C924	87-010-179-089		C-CAP,S 1200P-50 B
C925	87-010-198-089		C-CAP,S 0.022-25 B
C926	87-010-196-089		C-CAP,S 0.1-25 F
C927	87-010-181-089		C-CAP,S 1800P-50 B
C928	87-010-181-089		C-CAP,S 1800P-50 B
C929	87-010-382-089		CAP,E 22-25 SME
C941	87-010-197-089		C-CAP,S 0.01-25 B
C942	87-010-197-089		C-CAP,S 0.01-25 B
C950	87-010-196-089		C-CAP,S 0.1-25 F
C991	87-010-322-089		C-CAP,S 100P-50 CH
C992	87-010-322-089		C-CAP,S 100P-50 CH
C993	87-010-322-089		C-CAP,S 100P-50 CH
C994	87-010-322-089		C-CAP,S 100P-50 CH
C995	87-010-197-089		C-CAP,S 0.01-25 B
C996	87-010-197-089		C-CAP,S 0.01-25 B
L901	87-005-490-089		COIL,270UH J FLR50
MVR741	84-MA1-712-019		VR,50KB X 2 (M)

DECK-1 C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SOL1	82-ZM1-618-319		SOL ASSY,27
SW4	87-036-110-019		SW,PUSH SPPB 62
SW5	87-036-110-019		SW,PUSH SPPB 62
SW6	87-036-110-019		SW,PUSH SPPB 62

DECK-2 C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SFR1	87-024-581-019		SFR,3.3K DIA 6H KOA
SOL2	82-ZM1-618-319		SOL ASSY,27
SW2	87-036-110-019		SW,PUSH SPPB 62
SW3	87-036-110-019		SW,PUSH SPPB 62
SW4	87-036-110-019		SW,PUSH SPPB 62
SW5	87-036-110-019		SW,PUSH SPPB 62
SW6	87-036-110-019		SW,PUSH SPPB 62

KEY C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C350	87-010-197-089		C-CAP,S 0.01-25 B
C351	87-010-197-089		C-CAP,S 0.01-25 B
LED417	87-002-787-080		LED,SEL 6215S RED<HE,G,LH>
LED417	87-002-588-080		LED,SEL 6515c TP5<EE,K,EZ,Z>
LED418	87-002-787-080		LED,SEL 6215S RED<HE,G,LH>
LED418	87-017-588-080		LED,SEL 6515C TP5<EE,K,EZ,Z>
LED419	87-017-787-080		LED,SEL 6215S RED<HE,G,LH>
LED419	87-017-588-080		LED,SEL 6515C TP5<EE,K,EZ,Z>
S351	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S351	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S352	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S352	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S353	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S353	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S354	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S354	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>
S355	87-036-170-089		SW,TACT<EE,K,EZ,Z>
S355	87-036-215-089		SW,TACT EVQ21404M<HE,G,LH>

AC C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
R101	87-022-184-089		RES METAL 0.33-1W

PT C.B< HE,LH >

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
⚠	87-033-147-019		CLAMP,FUSE<HE,LH>
⚠ F101	87-035-415-019		FUSE, T2.5A 250V UL<HE,LH>
⚠ PT101	84-MA1-641-019		PT,4MA1 H<HE,LH>
⚠ PT101	83-NEG-616-019		PT,HI 3NEG EK<EXCEPT HE,LH>
⚠ S101	87-036-229-019		SW,SL DP3C RA<HE,LH>

RELAY-1 C.B

RELAY-2 C.B

MOTOR-1 C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
M302	87-045-305-019		MOTOR, RF-500TB

MOTOR-2 C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
M2	9X-262-513-210		SLED MOTOR ASSY
SW1	91-572-085-110		LEAF SW

SNSR C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SW401	87-026-573-019		P-SNSR,GP1S53V

U/D SW C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SW601	87-036-271-019		SW,LVR 1-2-2

OPEN SW C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SW602	87-036-271-019		SW,LVR 1-2-2

CLOSE SW C.B

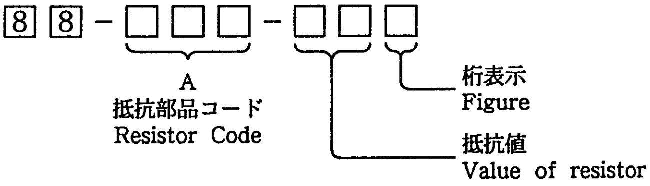
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SW501	87-036-109-019		SW,PUSH SPPB 61

TR C.B< EXCEPT HE,LH,G >

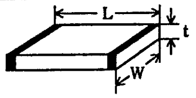
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED C.B			
LED903	87-017-806-010		LED,SEL 1810DM
LED904	87-017-942-089		LED,L-1573PGC-TNB 2.5
LED905	87-017-942-089		LED,L-1573PGC-TNB 2.5
LED906	87-017-806-010		LED,SEL 1810DM

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法 (mm)				Resistor Code : A 抵抗コード : A
				Form/外形	L	W	t	
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3126	±5%	CJ		3.2	1.6	0.5 ~0.7	128

IC DESCRIPTION

IC, LC866432V-5586

Pin No.	Pin Name	I/O	Description
1	O-PLL.CE	O	PLL IC (LC7218) chip enable output for tuner
2	GEQ CLK	-	Clock signal to graphic equalizer control IC (LC7522)
3	O-STB(M)	O	Strobe signal for shift register (BU4094, MAIN C.B).
4	O-DATA(M)	O	Serial data for shift register, PLL IC (LC7218, MAIN C.B),GEQ CONTROL IC (LC7522, FRONT C.B) SHIFT REGISTER (BU4094, DSP C.B)
5	O-CLK(M)	O	Clock signal for shift register, PLL IC (LC7218, MAIN C.B),GEQ CONTROL IC (LC7522, FRONT C.B) SHIFT REGISTER (BU4094, DSP C.B)
6	I-$\overline{\text{HOLD}}$	I	When the AC power is not supplied and the input is L, the controller is held. (Clock stop and memory maintain)
7	$\overline{\text{RESET}}$	I	Reset input.
8	I-$\overline{\text{STEREO}}$	I	Stereo ON signal input.
9	I-$\overline{\text{TUNE}}$/IFC	I	Tuner Stereo Detect input/IF count serial data input.
10	VSS1	-	Gnd.
11	CF1	-	5.76MHz oscillation circuit.
12	CF2	-	
13	VDD1	-	Power supply (+5.5V).
14	I-KEY1	I	Key matrix input.
15	I-KEY2	I	Key matrix input.
16	I-KEY3	I	Key matrix input.
17	I-CD/SW	I	CD tray OPEN/CLOSE switch signal.
18	I-CD/DISH	I	CD Control (Photo sensor input)
19	I-MS	I	Music senor input signal.
20	I-SPEANA	I	Spectrum Analyser IC music level input
21	I-MIC	I	Mic input signal.
22	I-TM/BASE	I	Clock pulse (8Hz) input from PLL IC (LC7218).
23	I-SENSE(CD)	I	CD control.
24	I-RMC	I	Remote control input.
25 ~ 35	G11 ~ G1	O	FL display grid output.
36 ~ 40	P23 ~ P19	O	FL display segment output.
41	VDD2	-	Power supply (+5.5V).
42	–VP	-	Negative pulldown voltage.
43	P18/I-SW.CST1	I/O	FL display segment output/Deck 1 Cassette switch input.
44	P17/I-CAM1	I/O	FL display segment output/Deck 1 play input.
45	P16/I-SW.AUTO1	I/O	FL display segment output/Deck 1 auto stop pulse input.
46	P15/I-SW.AUTO2	I/O	FL display segment output/Deck 2 auto stop pulse input.
47	P14/I-SW.CAM2	I/O	FL display segment output/Deck 2 play input.
48	P13/I-SW.REB	I/O	FL display segment output/Deck 2 side B rec switch input.
49	P12/I-SW.CST2	I/O	FL display segment output/Deck 2 cassette switch input.
50	P11/I-SW.REA	I/O	FL display segment output/Deck 2 side A rec switch input.
51	P10	I/O	FL display segment output.
52	P1	I/O	FL display segment output.
53	P2	I/O	FL display segment ouputt.

Pin No.	Pin Name	I/O	Description
54	P3	I/O	FL display segment output.
55	P4	I/O	FL display segment output.
56	P5/I-$\overline{\text{DSP}}$	I/O	FL display segment output/DSP disable input.
57	P6/I-$\overline{\text{BBE}}$	I/O	FL display segment output/BBE disable input.
58	P7/I-SW	O	FL display segment output/short wave select input.
59	P8/I-AM 10K	O	FL display segment output/AM 10kHz step select input
60	P9/I-LW	I/O	FL display segment output/Long wave select input.
61	O-CLOSE(CD)	O	CD tray CLOSE signal.
62	O-OPEN(CD)	O	CD tray OPEN signal.
63	O-DI/R(CD)	O	CD dish rotates anti-clockwise signal.
64	O-DI/F(CD)	O	CD dish rotates clockwise signal.
65	O-$\overline{\text{POWER}}$	O	Power $\overline{\text{ON}}$/OFF control.
66	O-$\overline{\text{SOL1}}$	O	Deck 1 Plunger $\overline{\text{ON}}$/OFF output.
67	O-$\overline{\text{SOL2}}$	O	Deck 2 Plunger $\overline{\text{ON}}$/OFF output.
68	O-$\overline{\text{MOTOR}}$	O	Deck motor $\overline{\text{ON}}$/OFF output.
69	O-KEY.SCAN	O	Switch scan timing output.
70	O-STB(F)	O	Strobe signal for shift register (BU4094, FRONT C.B)
71	O-CLK(F)	O	Clock signal for shift register (BU4094, FRONT C.B)
72	O-DATA(F)	O	Serial data for shift register (BU4094, FRONT C.B)
73	VSS2	O	Gnd.
74	DSP/STB	O	Strobe signal for shift register and digital delay IC (DSP C.B)
75	O-DATA(CD)	O	CD control data output.
76	O-XLT(CD)	O	CD control data latch output.
77	O-CLK(CD)	O	Clock signal for CD control data.
78	I-SUBQ(CD)	I	Sub-Q data input from CD IC (CXD2518Q).
79	O-SQCLK(CD)	O	Clock signal for Sub-Q data input.
80	O-DSP CE	O	DSP (M65830P) chip enable logic.

IC, CXD2518Q

Pin No.	Pin Name	I/O	Description
1	SCOR	O	Outputs high signal when either subcode sync S0 or S1 is detected. (Not used)
2	SBSO	O	Sub P to W serial output. (Not used)
3	EXCK	I	SBSO readout clock input. (Not used)
4	SQSO	O	SubQ 80-bit serial output.
5	SQCK	I	SQSO readout clock input.
6	MUTE	I	High : mute; low: release. (Connected to Gnd)
7	SENS	O	SENS output to CPU (LC866432V).
8	XRST	I	System reset. Reset when low.
9	DATA	I	Serial data input from CPU (LC866432V).
10	XLAT	I	Latch input from CPU (LC866432V). Serial data is latched at the falling edge.
11	CLOK	I	Serial data transfer clock input from CPU (LC866432V).
12	VSS	-	GND.
13	SEIN	I	Sense input from SSP (CXA1782BQ).
14	CNIN	I	Track jump count signal input.
15	DATO	O	Serial data output to SSP (CXA1782BQ).
16	XLTO	O	Serial data latch output to SSP (CXA1782BQ). Latched at the falling edge.
17	CLKO	O	Serial data transfer clock output to SSP (CXA1782BQ).
18	TEST2	I	Test pin; normally connected to VDD.
19	SPOB	I	Microcomputer extended interface (input B). (Connected to SW1)
20	SPOC	I	Microcomputer extended interface (input C). (Connected to VDD)
21	SPOD	I	Microcomputer extended interface (input D). (Connected to VDD)
22	XLON	O	Microcomputer extended interface (output). (Not used)
23	FOK	I	Focus OK input. Used for SENS output and the servo auto sequencer.
24	MON	O	Spindle motor on/off control output.
25	MDP	O	Spindle motor servo control output.
26	MDS	O	Spindle motor servo control. (Not used)
27	LOCK	O	GFS is sampled at 460 Hz; when GFS is high, this pin outputs a high signal. If GFS is low eight consecutive samples, this pin outputs low.
28	TEST	I	TEST pin. Normally GND.
29	FILO	O	Master PLL (slave = digital PLL) filter output.
30	FILI	I	Master PLL filter input.
31	PCO	O	Master PLL charge pump output.
32	VDD	-	Digital power supply for DSP (+5V).
33	AVSS1	-	Analog GND for DSP.
34	CLTV	I	Master PLL VCO control voltage input.
35	AVDD1	-	Analog power supply for DSP (+5V).
36	RF	I	EFM signal input.
37	BIAS	I	Constant current input of asymmetry compensation circuit.
38	ASYI	I	Asymmetry compensation circuit comparator voltage input.
39	ASYO	O	EFM full-swing output (low = VSS, high = VDD).
40	ASYE	I	Compensation off; high: asymmetry compensation on. (Connected to VDD)

Pin No.	Pin Name	I/O	Description
41	WDCK	O	D/A interface for 48-bit slot. Word clock (2FS). (Not used)
42	LRCK	O	D/A interface for 48-bit slot. LR clock (FS).
43	LRCKI	I	LR clock input for DAC. (48-bit slot)
44	PCMD	O	D/A interface. Serial data (two's complement, MSB first).
45	PCMDI	I	Audio data input for DAC. (48-bit slot)
46	BCK	O	D/A interface. Bit clock.
47	BCKI	I	Bit clock input for DAC. (48-bit slot)
48	GTOP	O	GTOP output. (Not used)
49	XUGF	O	XUGF output. (Not used)
50	XPCK	O	XPLCK output. (Not used)
51	GFS	O	GFS output. (Not used)
52	RFCK	O	RFCK output. (Not used)
53	VSS	-	GND.
54	C2PO	O	C2PO output. (Not used)
55	XROF	O	XRAOF output. (Not used)
56	MNT3	O	MNT3 output. (Not used)
57	MNT1	O	MNT1 output. (Not used)
58	MNT0	O	MNT0 output. (Not used)
59	FSTT	O	2/3 frequency divider output for Pins 73 and 74. (Not used)
60	C4M	O	4.2336 MHz output. (Not used)
61	DOUT	O	Digital Out output.
62	EMPH	O	Outputs high signal when the playback disc has emphasis, low signal when no emphasis.
63	EMPHI	I	DAC de-emphasis on/off. High: on; low: off.
64	WFCK	O	WFCK (write frame clock) output. (Not used)
65	ZEROL	O	No-sound data detection output; high when "no audio" data is detected. (Left channel) (Not used)
66	ZEROR	O	No-sound data detection output; high when "no audio" data is detected. (Right channel) (Not used)
67	DTSI	I	Test pin 1 for DAC; normally low. (Connected to Gnd)
68	VDD	-	Digital power supply for DAC (+5V).
69	LPWM	O	Left channel PWM output. (Forward phase)
70	NLPWM	O	Left channel PWM output. (Reverse phase)
71	AVDD2	-	Power supply for left channel PWM driver (+5V).
72	AVDD3	-	Power supply for crystal (+5V).
73	XTAI	I	33.8688 MHz crystal oscillation circuit input.
74	XTAO	O	33.8688 MHz crystal oscillation circuit output.
75	AVSS3	-	GND for crystal.
76	AVSS2	-	GND for PWM driver.
77	NRPWM	O	Right channel PWM output. (Reverse phase)
78	RPWM	O	Right channel PWM output. (Forward phase)
79	DTS2	I	DAC test pin 2; normally low. (Connected to Gnd)
80	DTS3	I	DAC test pin 3; normally low. (Connected to Gnd)

IC, XR1090 ACP

Pin No.	Pin Name	I/O	Description
1	A	I	Multiplexer Control A (see table -1).
2	B	I	Multiplexer Control B (see table -1).
3	C	I	Multiplexer Control C (see table -1).
4	SEL	I	Low to disable A,B,C. High to enable the output.
5	CLKR	-	Clock resistor: The timing resistor would be tied from this pin to pin CLKC.
6	CLKC	-	Clock capacitor: The timing capacitor should be tied to this pin to ground.
7	NC	-	No connection.
8	VSS	-	Nominally 5V.
9	GND	-	Ground for both digital and analog.
10	A-OUT	O	Peak hold output of all the filters. This output can drive a 10KΩ load.
11	NC	-	No connection.
12	RIN	I	Right Channel Input: The input impedance of this pin is greater than 1MΩ.
13	LIN	I	Left Channel Input: The input impedance of this pin is greater than 1MΩ.
14	VDD	-	Nominally 5V.

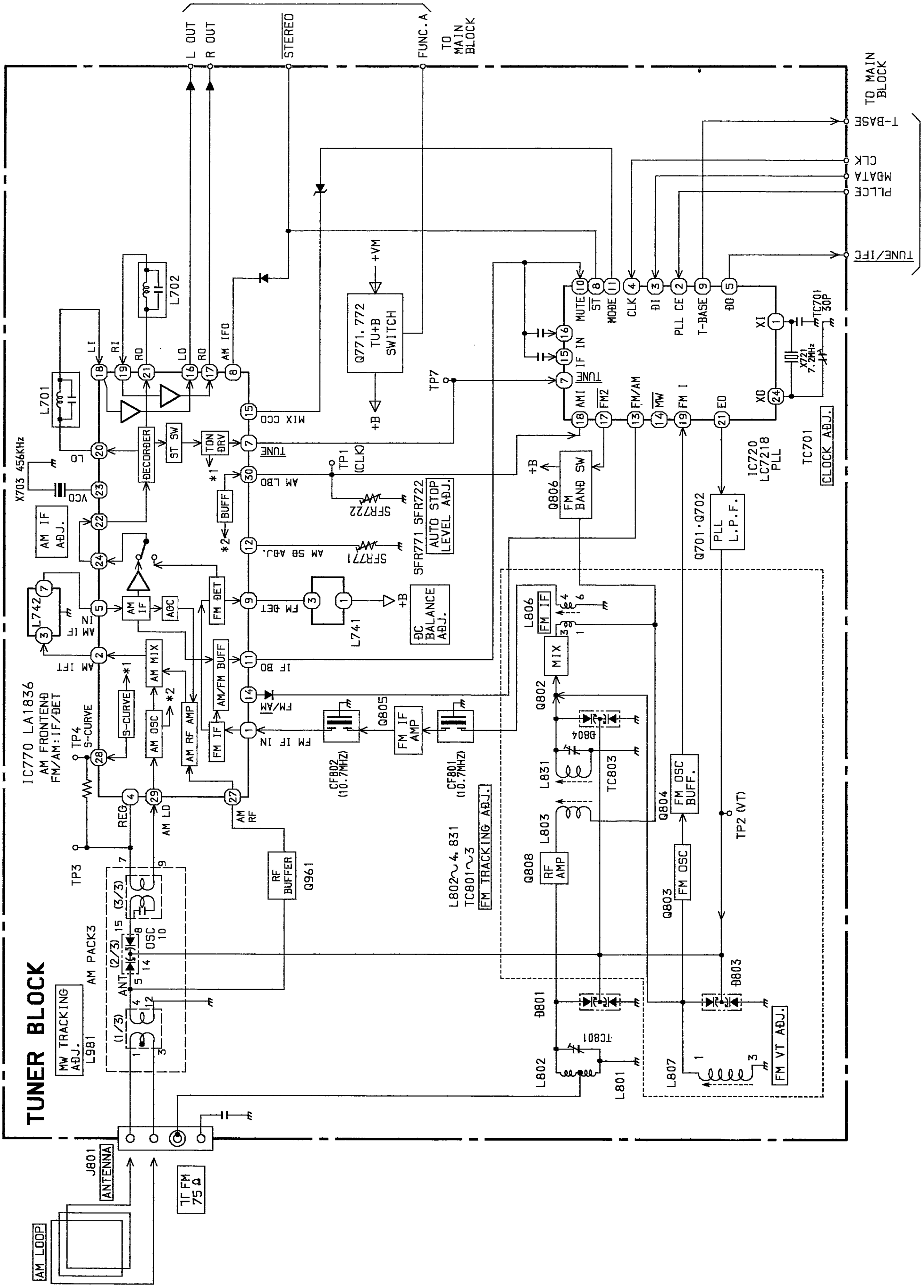
Table -1. Filter Select Table

SEL	A	B	C	AOUT
0	X	X	X	GND
1	0	0	1	65Hz
1	0	1	0	150Hz
1	0	1	1	350Hz
1	1	0	0	1KHz
1	1	0	1	3KHz
1	1	1	0	6.3KHz
1	1	1	1	12KHz
1	0	0	0	GND

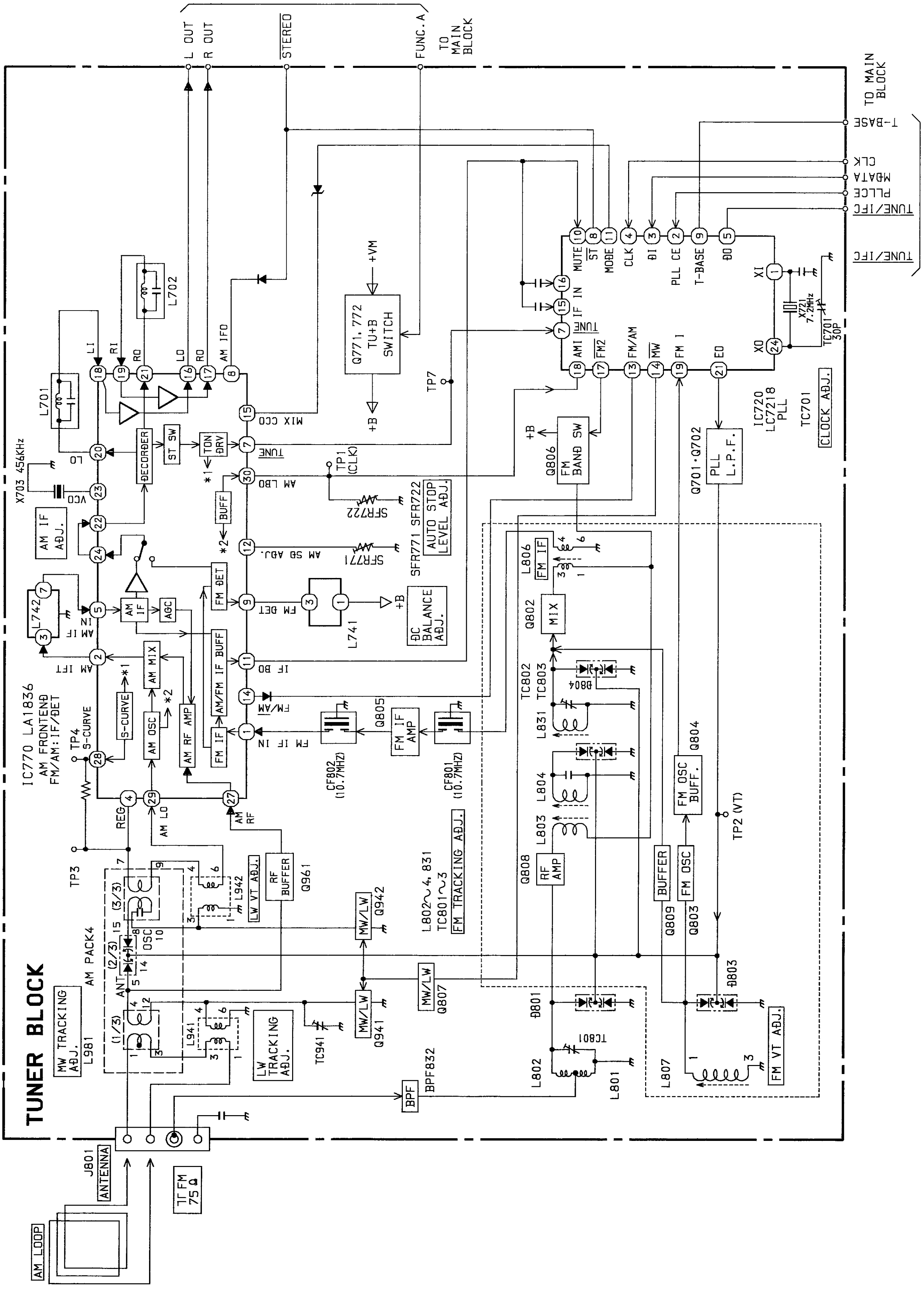
IC, LC7218

Pin No.	Pin Name	I/O	Description
1	X-IN	-	A crystal oscillator (7.2MHz) is connected between these pins.
24	X-OUT	-	
2	CE	I	To enable the IC. Active "H".
3	DI	I	Digital data input from CPU (LC866432V-5586) when relevant key is operated. Active "H".
4	CLK	I	To clock in the data DI.
5	DO	O	Digital data output to CPU (LC866432V-5586).
6	-	-	Not used.
7	$\overline{\text{TUNE}}$	I	Receives "L" when station is tuned.
8	$\overline{\text{ST}}$	I	Receives "L" when stereo is obtained.
9	T-BASE	O	Outputs a reference clock signal (8Hz) for the clock.
10	MUTE	O	To control internal counter.
11	MODE	O	Outputs "H" when stereo is switched.
12	$\overline{\text{SW2/FM}}$	-	Not used.
13	FM/$\overline{\text{AM}}$	O	To output "L" if AM & "H" is FM.
14	$\overline{\text{MW}}$	O	Outputs "L" when MW is selected. (HE, G, LH type only).
15, 16	IFIN	I	General purpose counter input.
17	$\overline{\text{FM2}}$	O	Outputs "L" when a FM broadcast is received.
18	AM-I	I	Receives the AM local oscillator frequency signal.
19	FM-I	I	Receives the FM local oscillator frequency signal.
20	VDD	-	Supply power to IC (+5V).
21	E.O	O	PLL charge pump output.
22	-	-	Not used.
23	VSS	-	Ground.

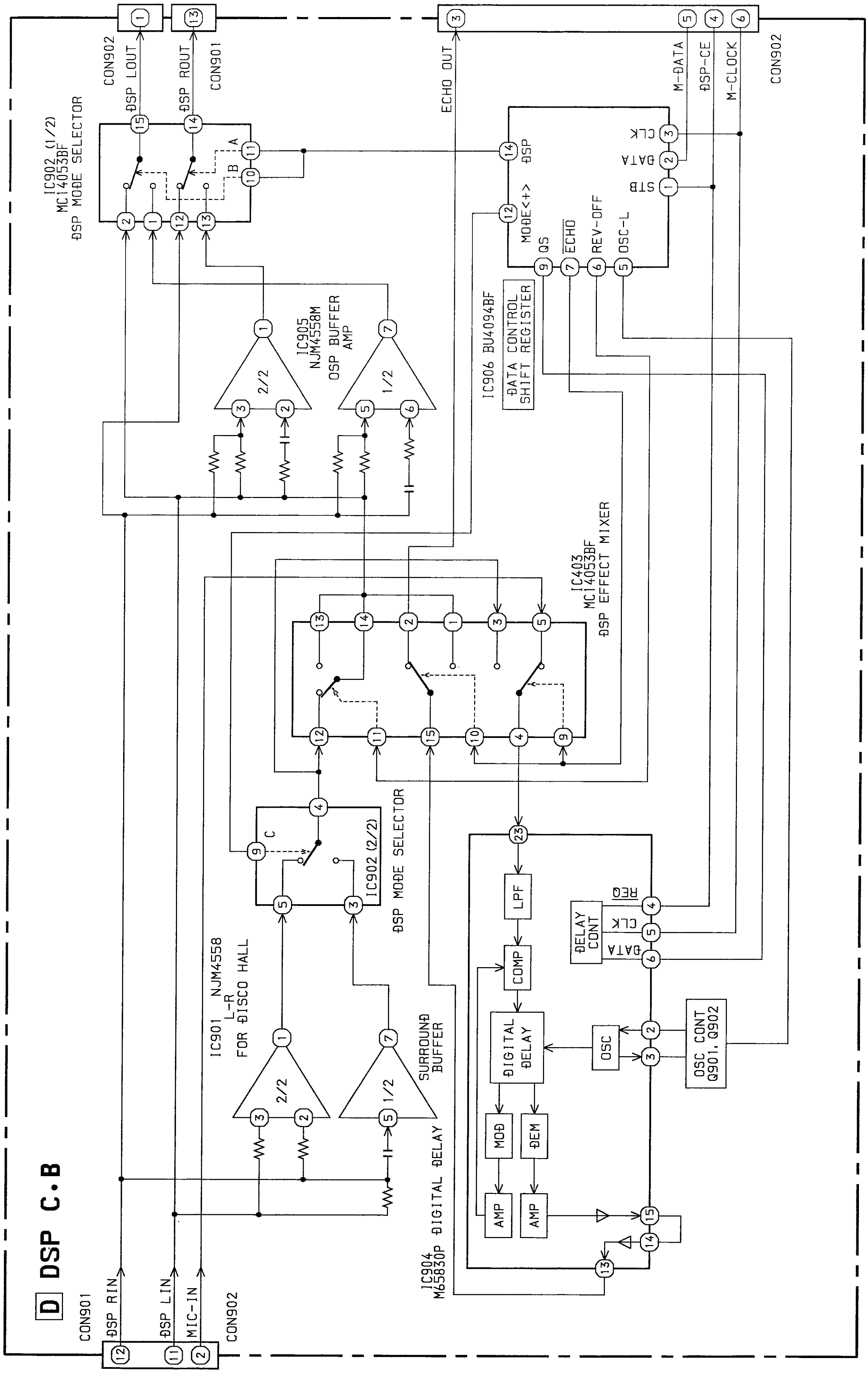
BLOCK DIAGRAM – 1 (TUNER : HE,G,LH)



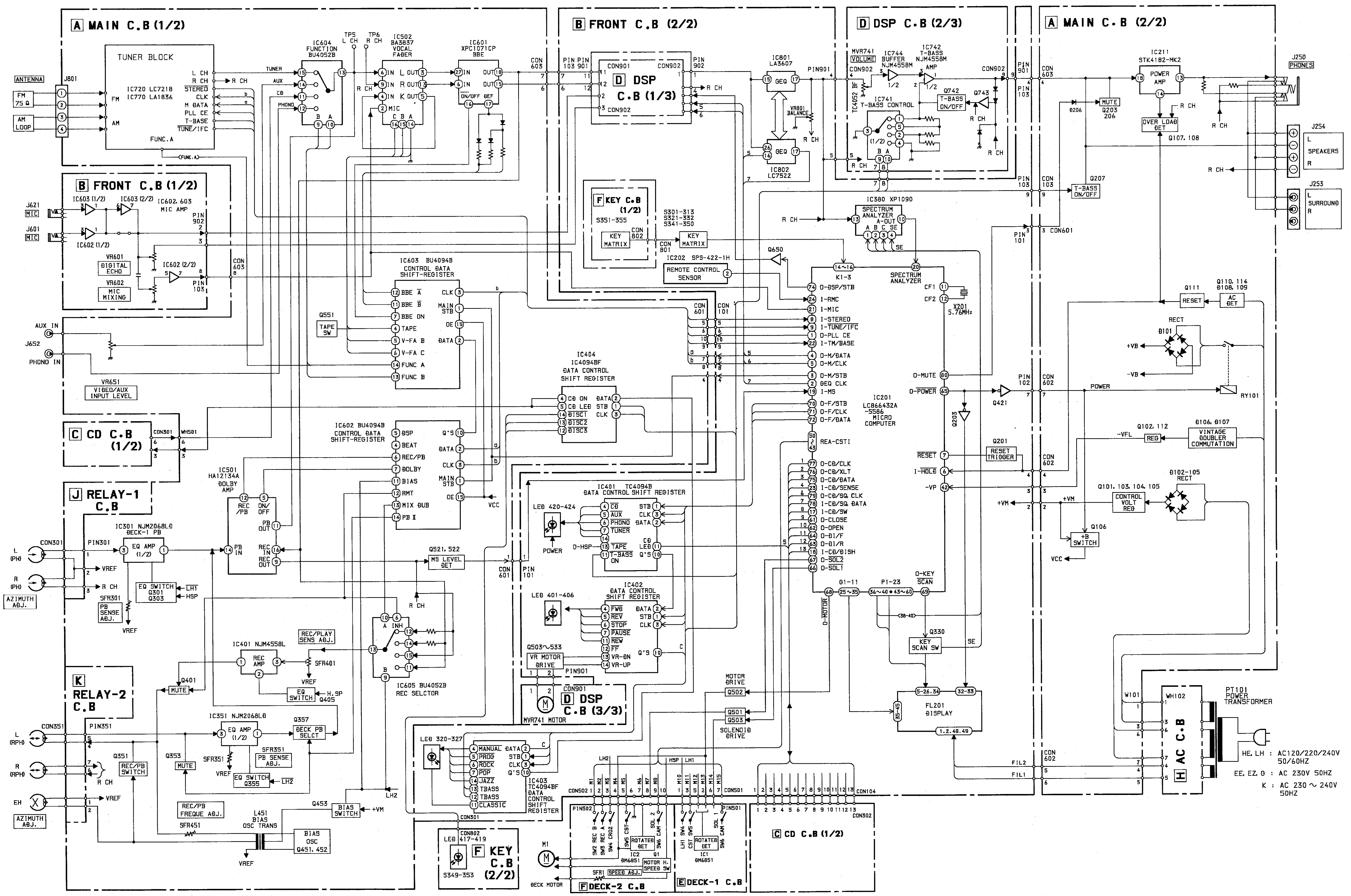
BLOCK DIAGRAM – 2 (TUNER : EE,K,EZ,Z)



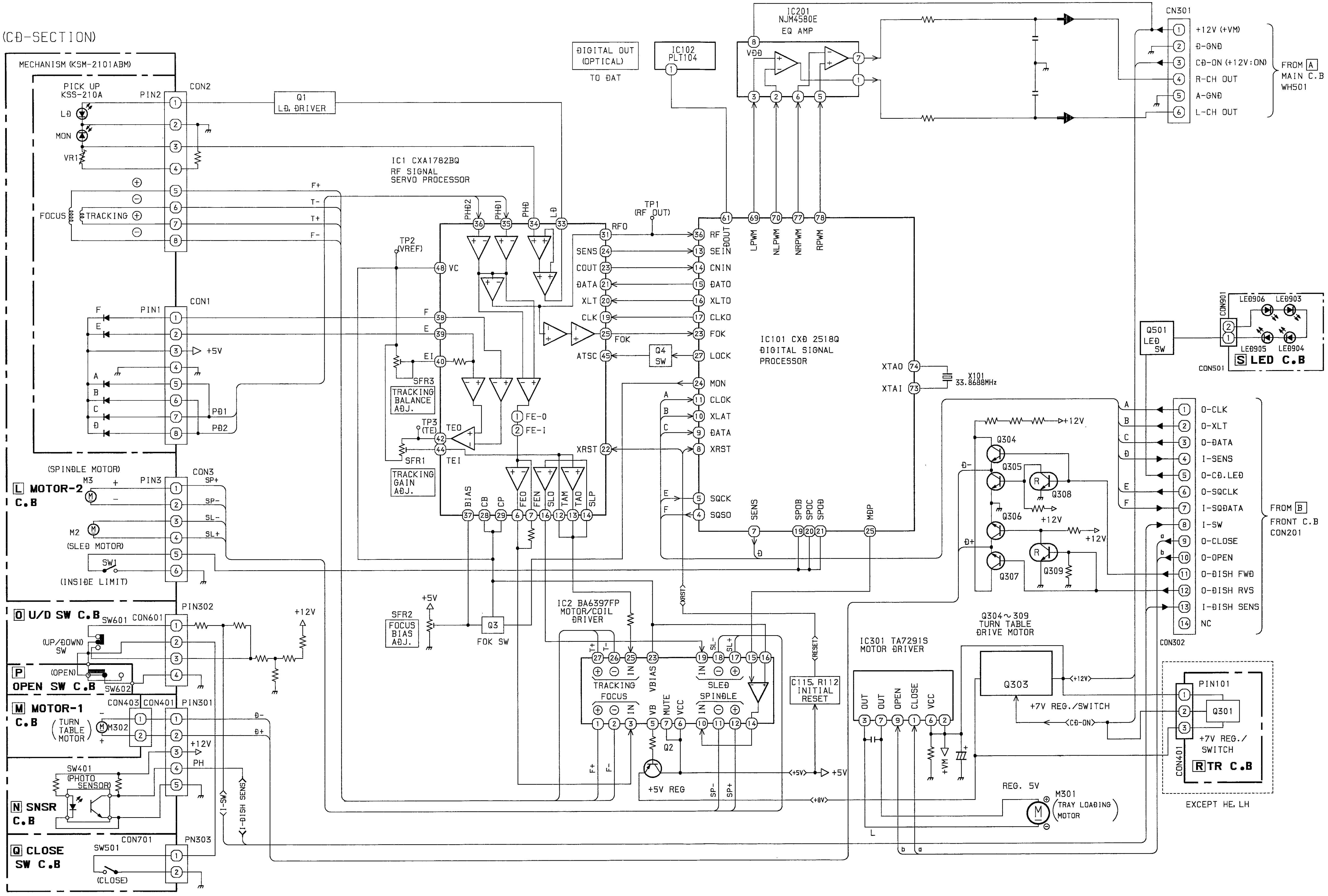
BLOCK DIAGRAM – 3 (DSP)



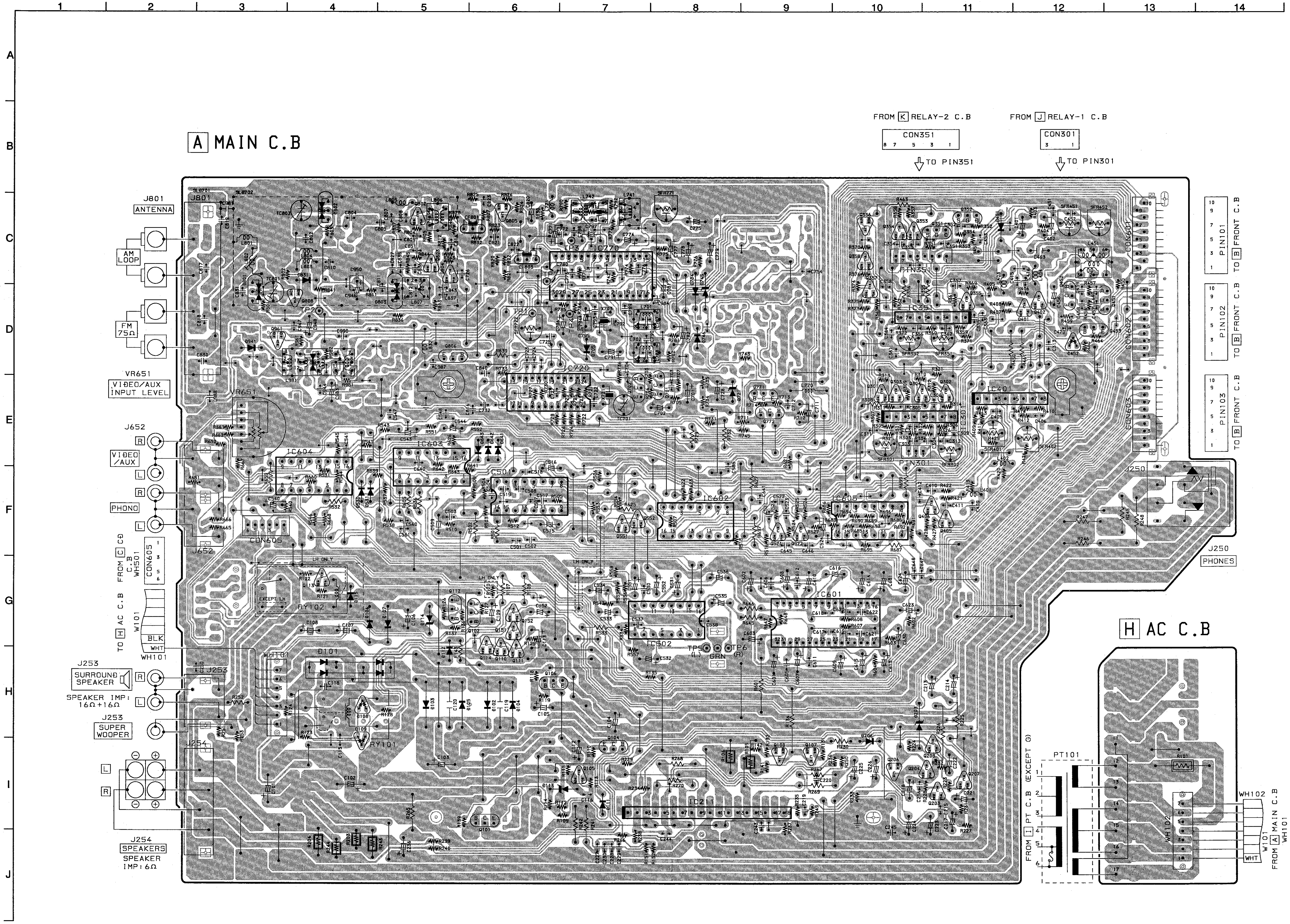
BLOCK DIAGRAM – 4 (MAIN / FRONT)



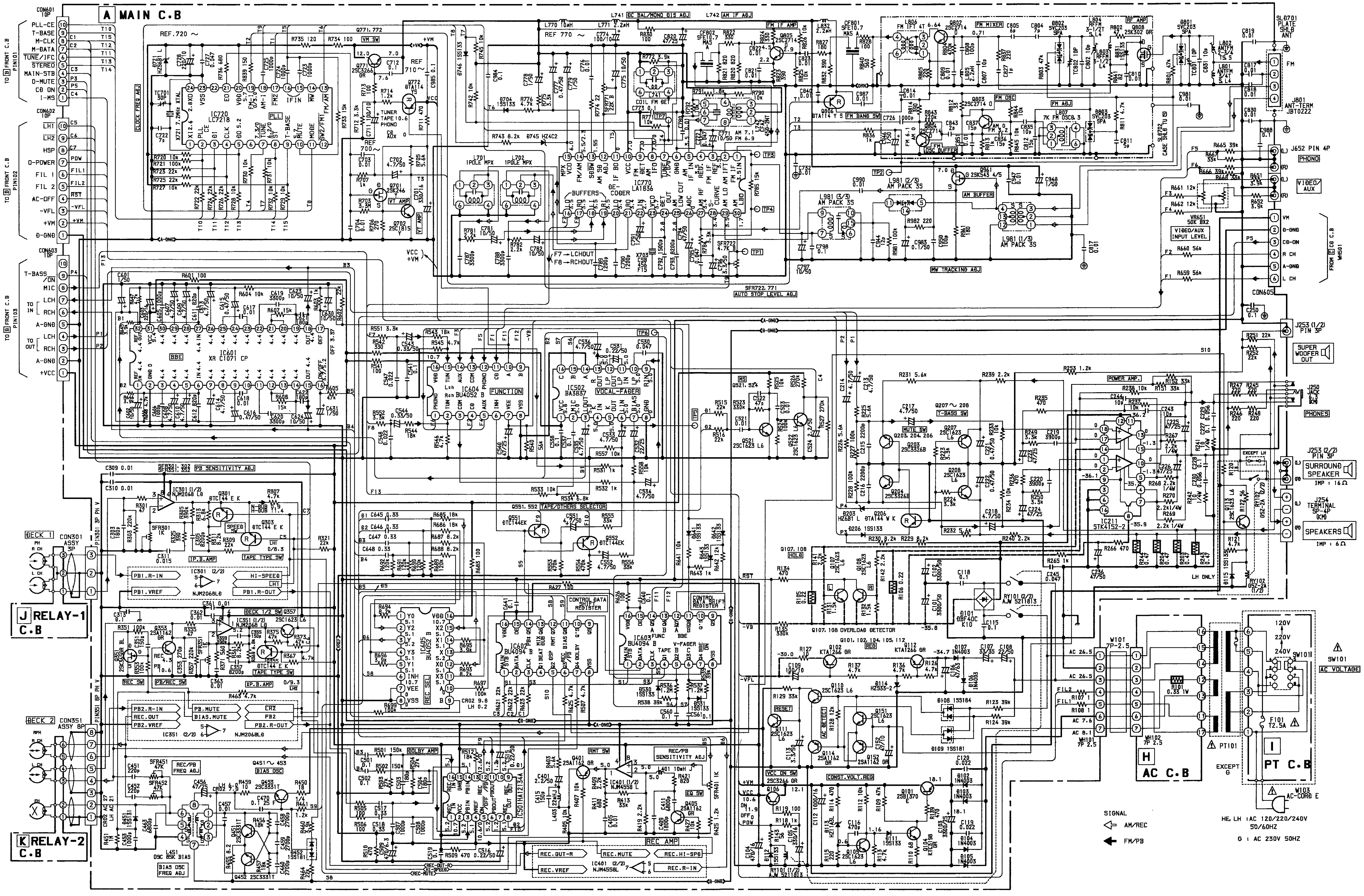
BLOCK DIAGRAM – 5 (CD)



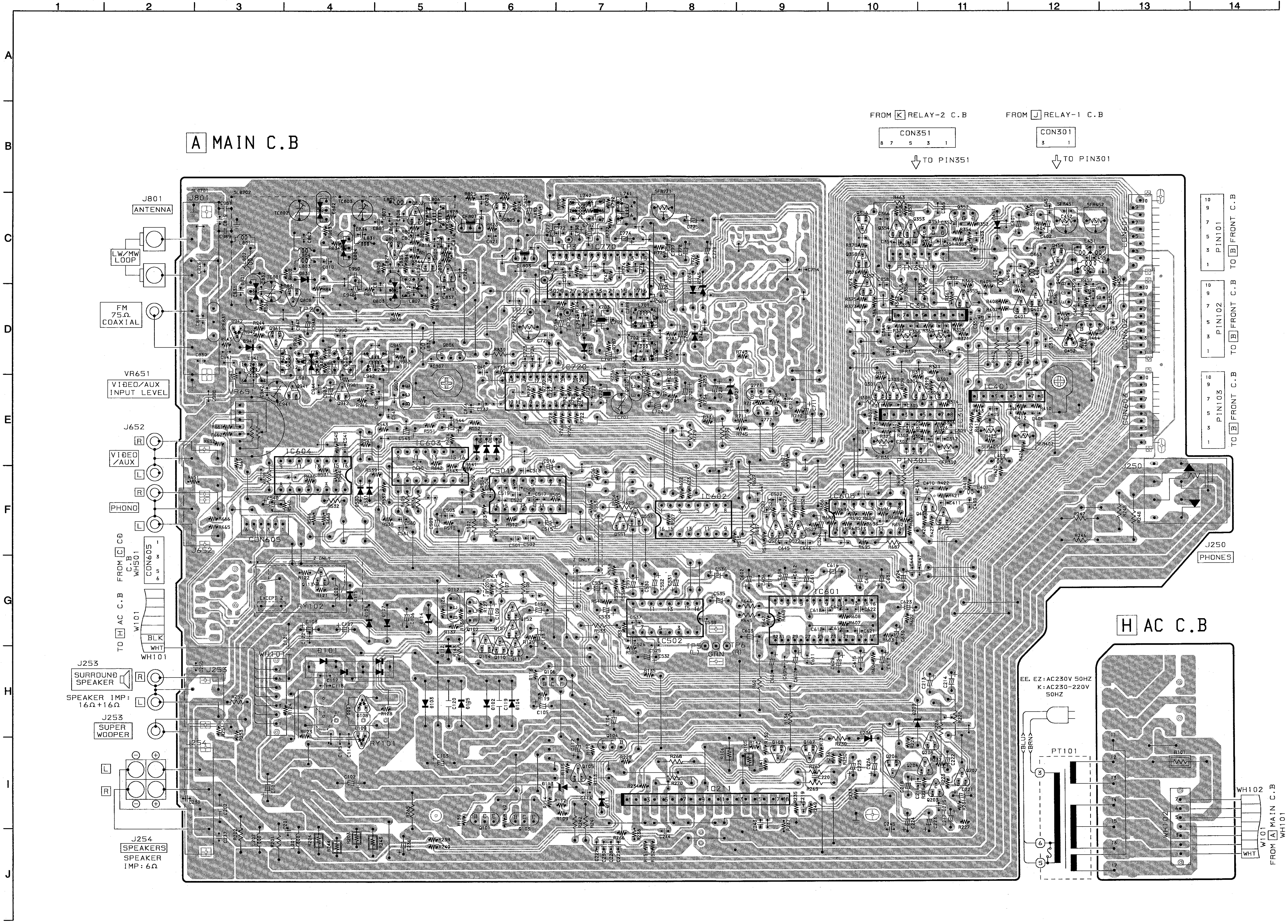
WIRING - 1 (MAIN :HE,G,LH)



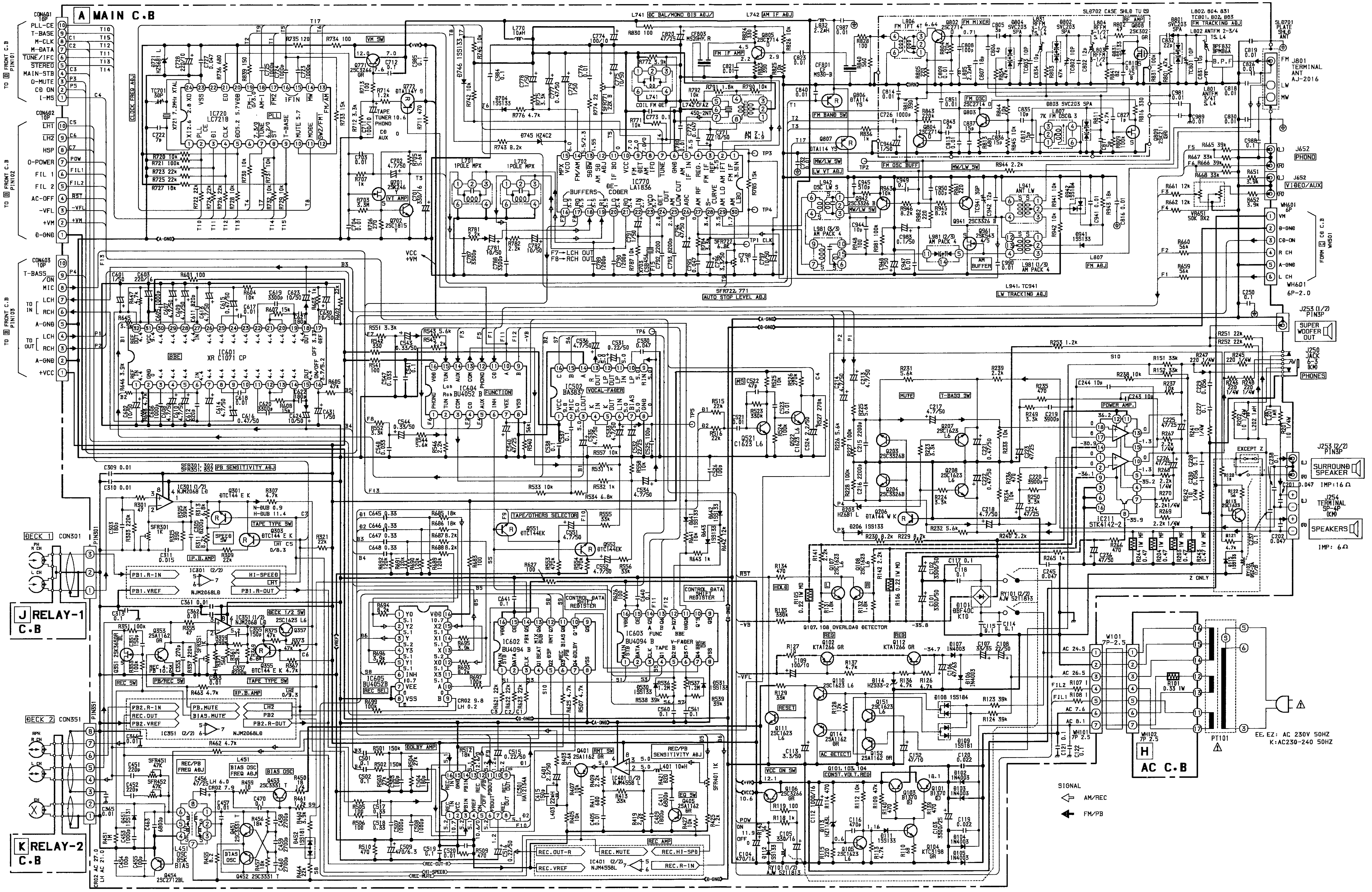
SCHEMATIC DIAGRAM – 1 (MAIN : HE,G,LH)



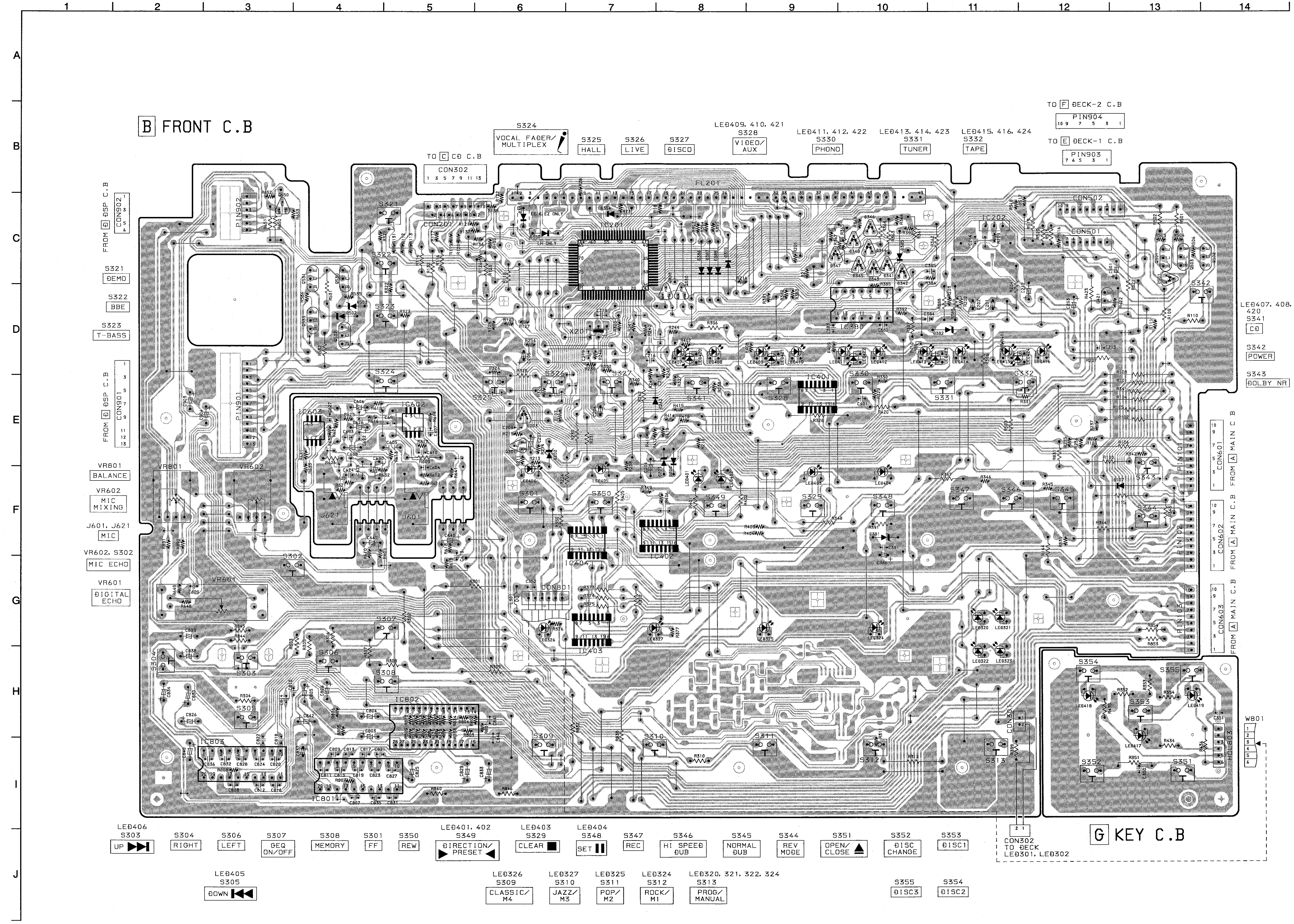
WIRING – 2 (MAIN : EE,K,EZ,Z)



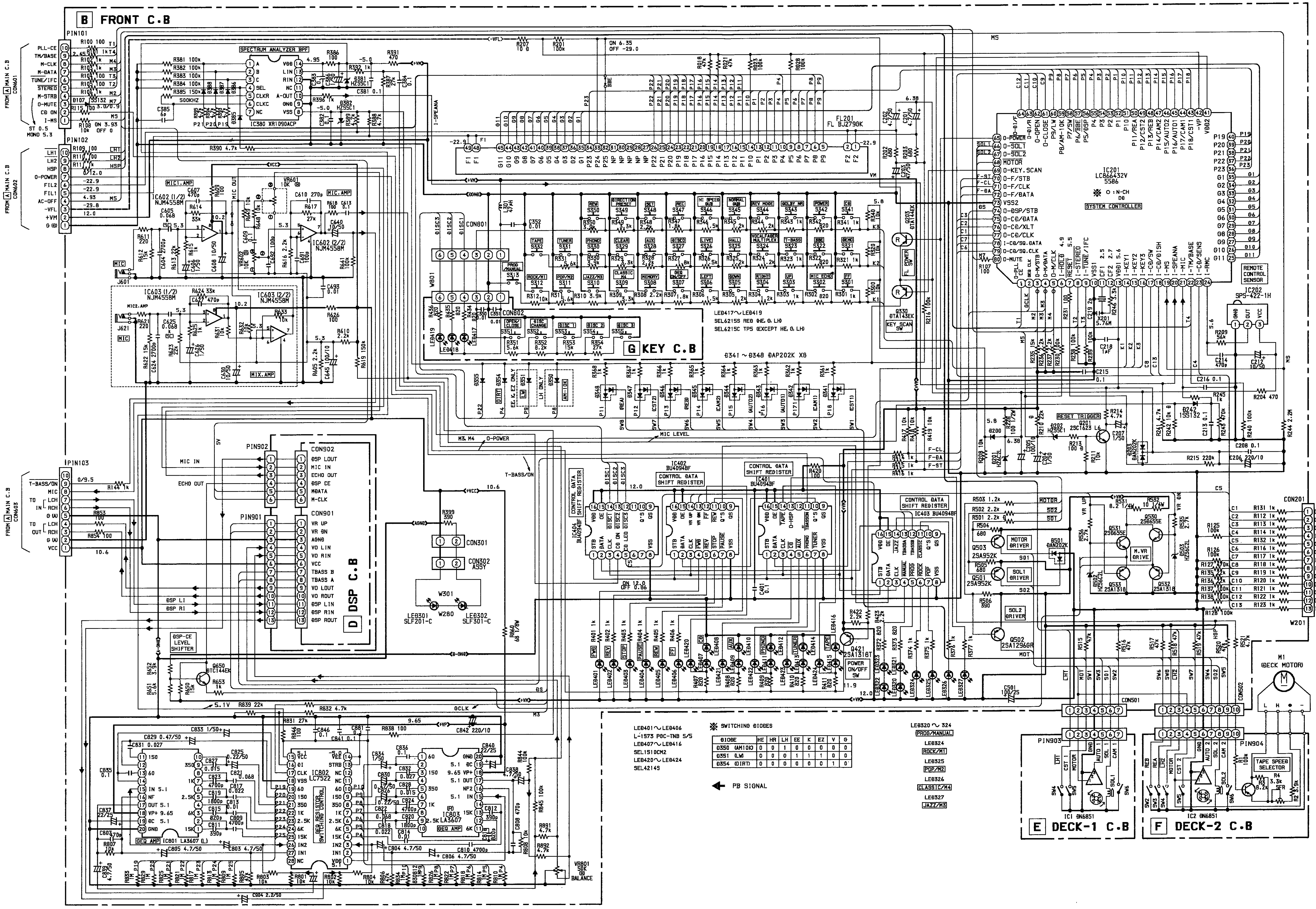
SCHEMATIC DIAGRAM – 2 (MAIN : EE,K,EZ,Z)



WIRING – 3 (FRONT)



SCHEMATIC DIAGRAM – 3 (FRONT)



LED401 ~ LED406
L-1573 PGC-TNB 5/5
LED407 ~ LED416
SEL1510CM2
LED420 ~ LED424
SEL4214S

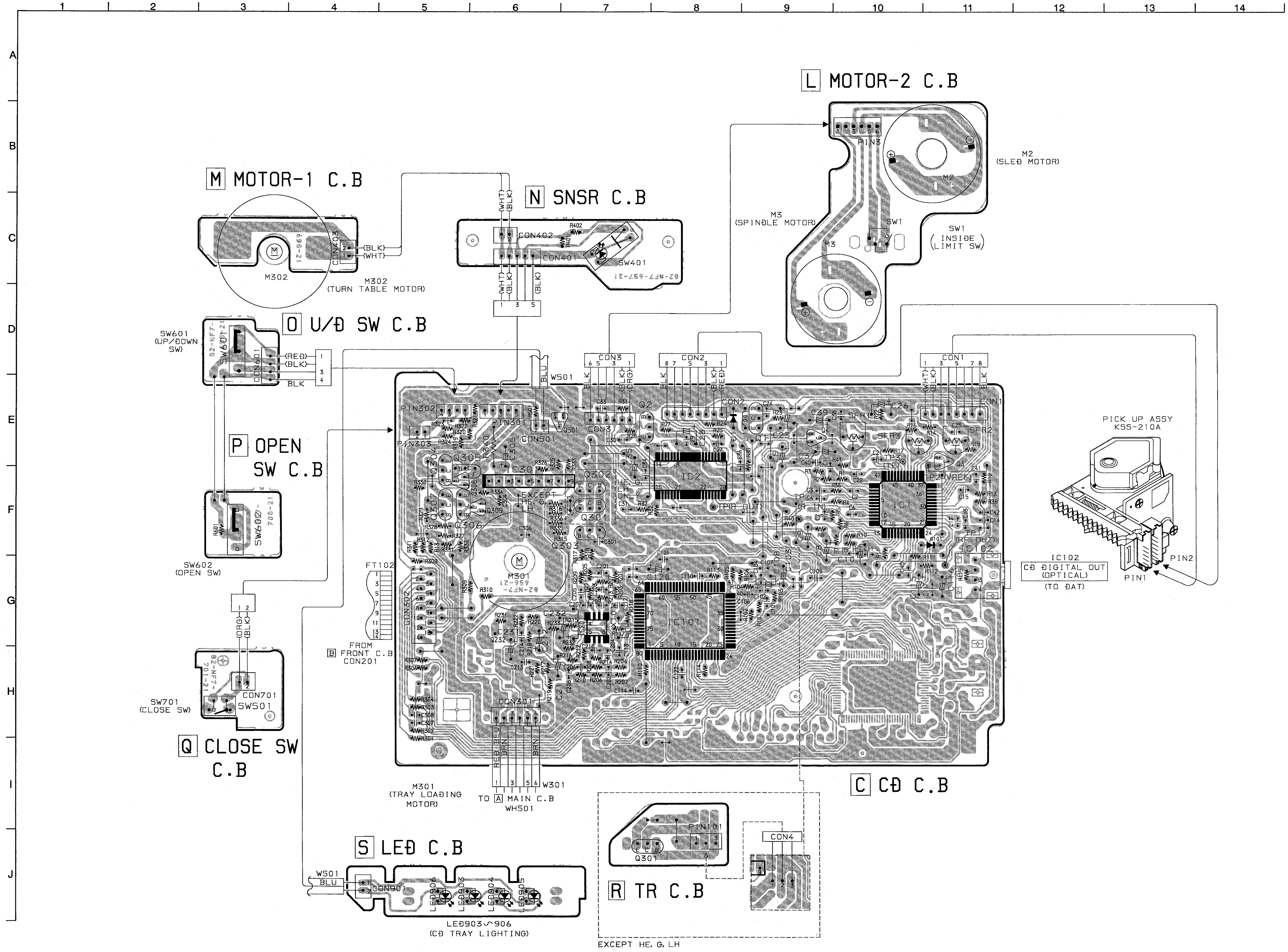
※ SWITCHING DIODES

DIODE	HE	HR	LH	EE	K	EZ	V	G
D350 (AM10K)	0	0	1	0	0	0	0	0
D351 (LW)	0	0	0	1	1	1	0	0
D354 (DIRT)	0	0	0	0	0	0	1	0

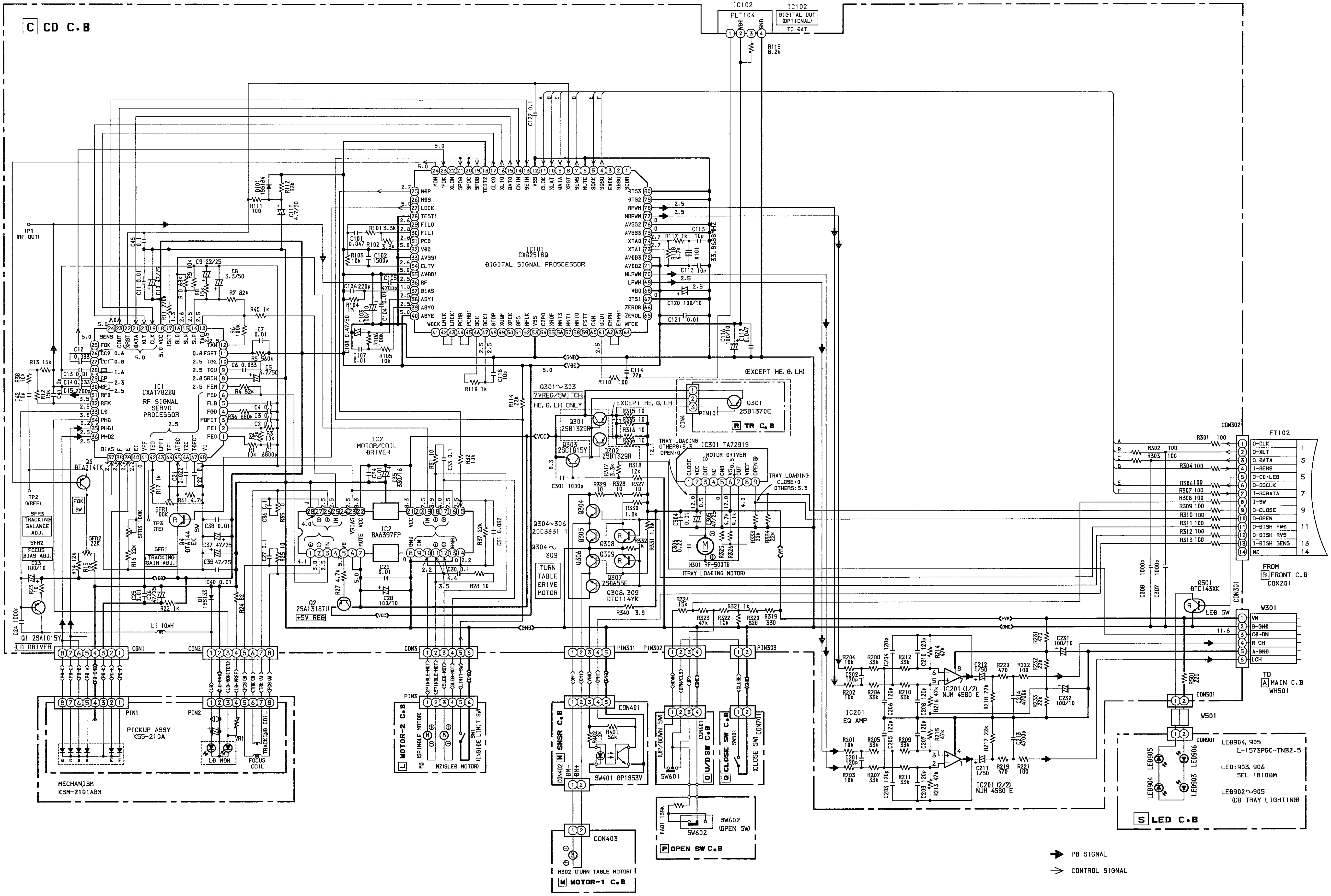
← PB SIGNAL

LED320 ~ 324
PROG/MANUAL
LED324
ROCK/M1
LED325
POP/M2
LED326
CLASSIC/M4
LED327
JAZZ/M3

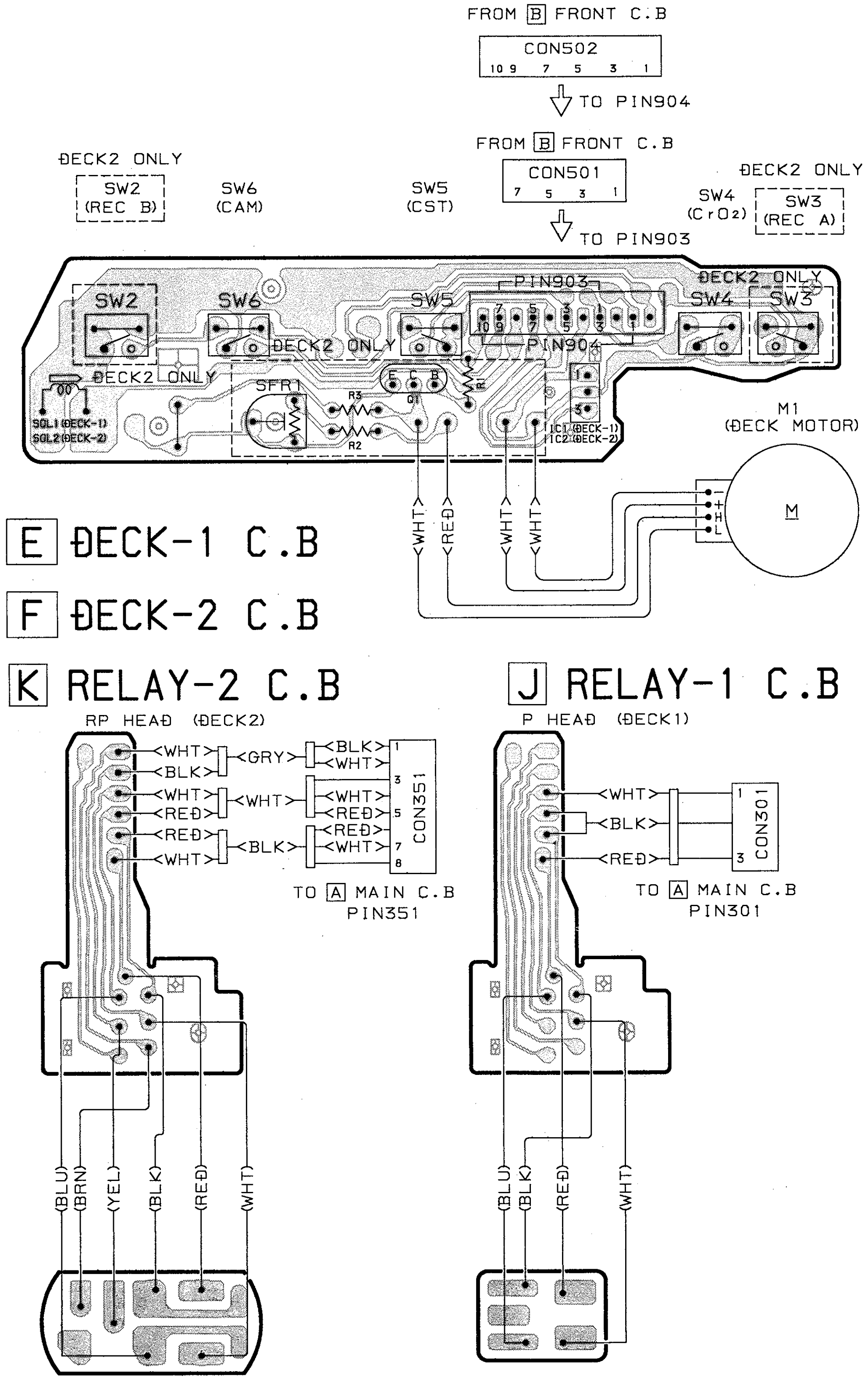
WIRING – 4 (CD)

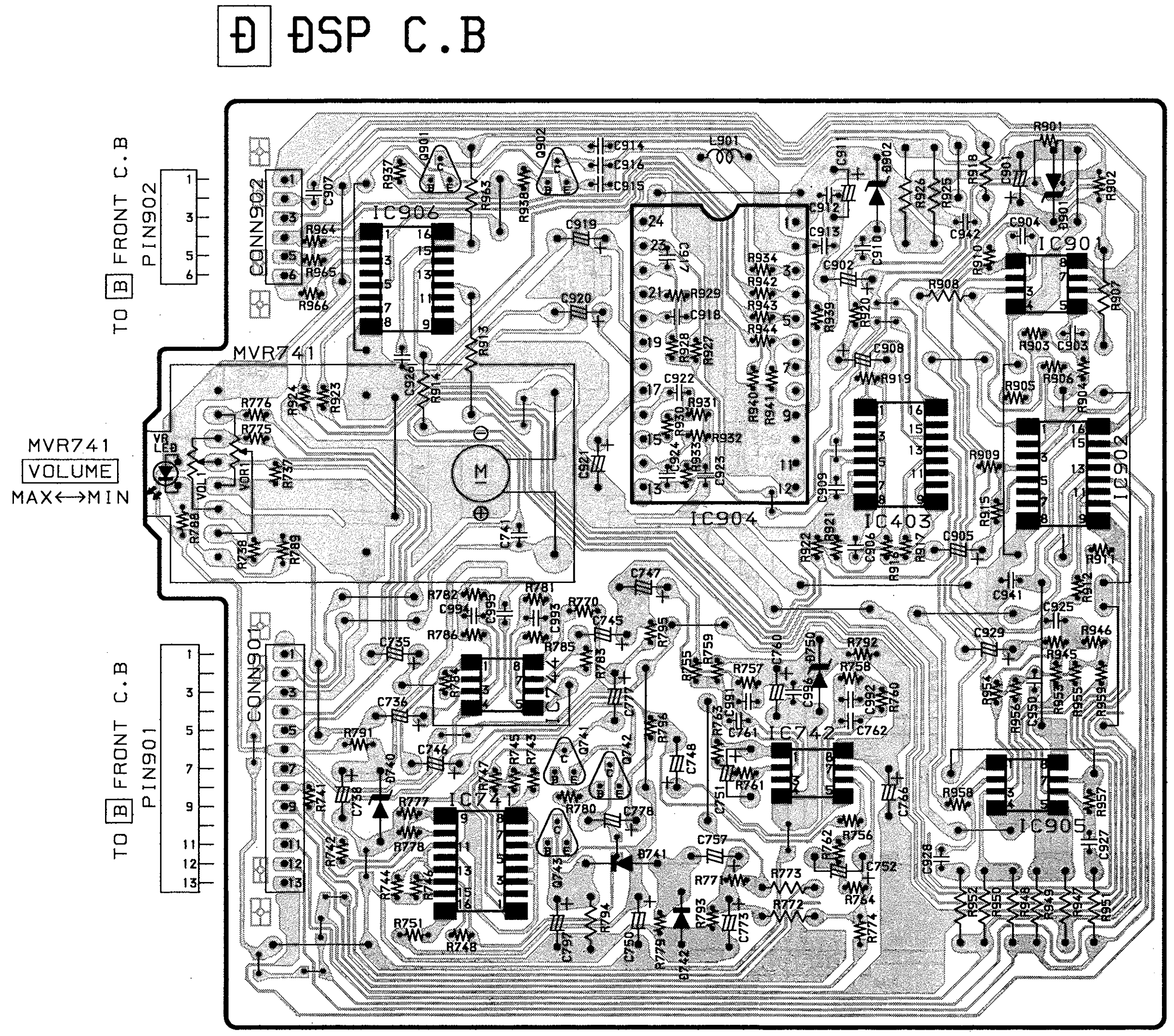

1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J
L MOTOR-2 C.B
PIN3
M2 (SLED MOTOR)
M3 (SPINDLE MOTOR)
SW1 (INSIDE LIMIT SW)
M MOTOR-1 C.B
CON403
(BLK)
(WHT)
M302
M302 (TURN TABLE MOTOR)
N SNSR C.B
CON402
CON401
R402
SW401
82-NF7-697-21
O U/D SW C.B
SW601 (UP/DOWN SW)
CON601
(RED)
(BLK)
BLK
P OPEN SW C.B
SW602 (OPEN SW)
Q CLOSE SW C.B
CON701
SW501
SW701 (CLOSE SW)
(ORG)
(BLK)
S LED C.B
W501 BLU
CON901
LED903∽906 (CD TRAY LIGHTING)
R TR C.B
PIN101
Q301
CON4
EXCEPT HE, G, LH
C CD C.B
CON1
CON2
CON3
(WHT)
(BLK)
(RED)
(ORG)
W501
BLU
PIN302
PIN301
PIN303
CON501
CON502
CON301
IC1
IC2
IC101
IC102
IC301
M301
FT102
FROM B FRONT C.B CON201
M301 (TRAY LOADING MOTOR)
TO A MAIN C.B WH501
W301
RED
BLU
BRN
PICK UP ASSY KSS-210A
PIN1
PIN2
IC102 CD DIGITAL OUT (OPTICAL) (TO DAT)

SCHEMATIC DIAGRAM – 4 (CD)

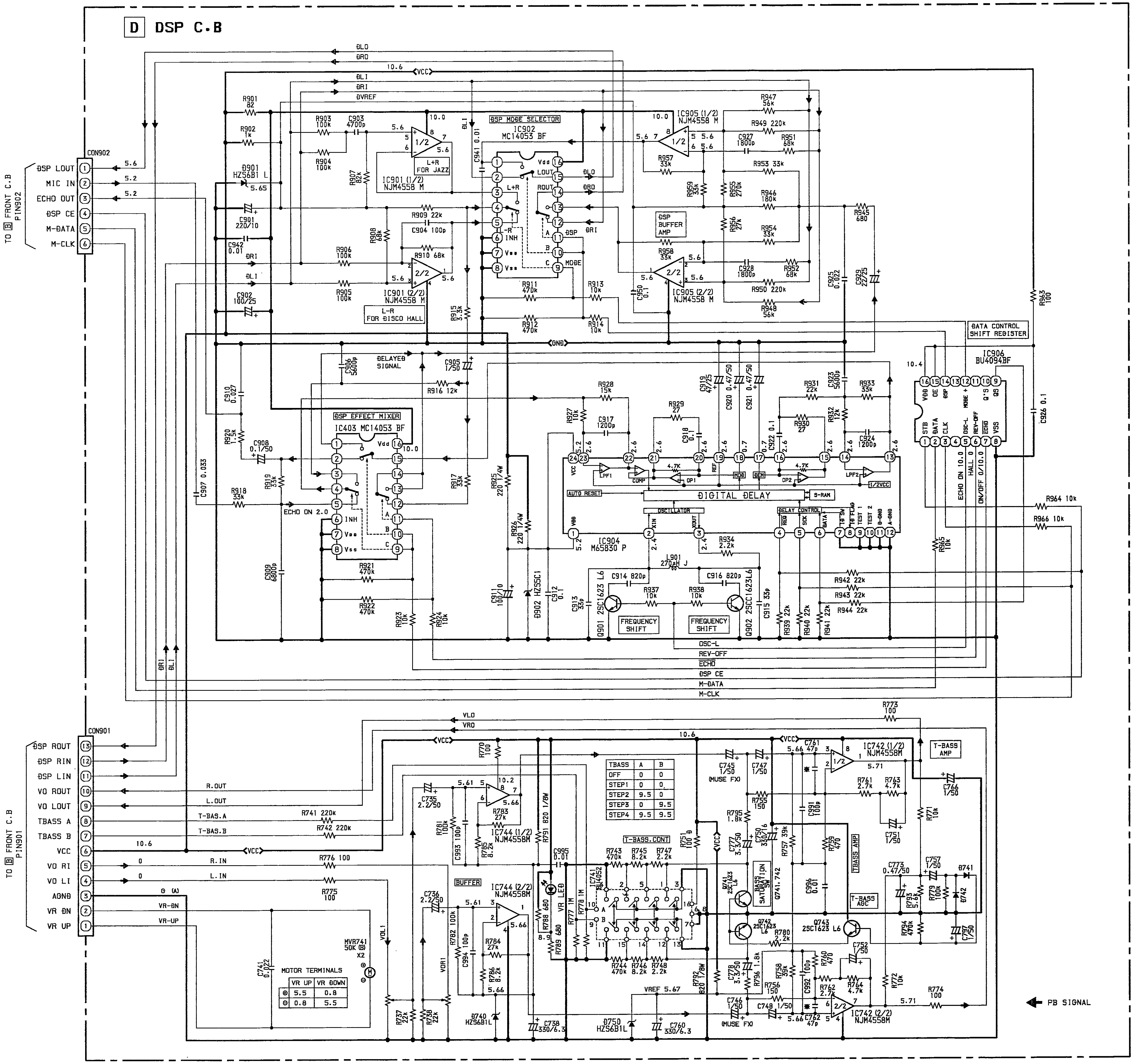


WIRING – 5 (DECK / DSP)

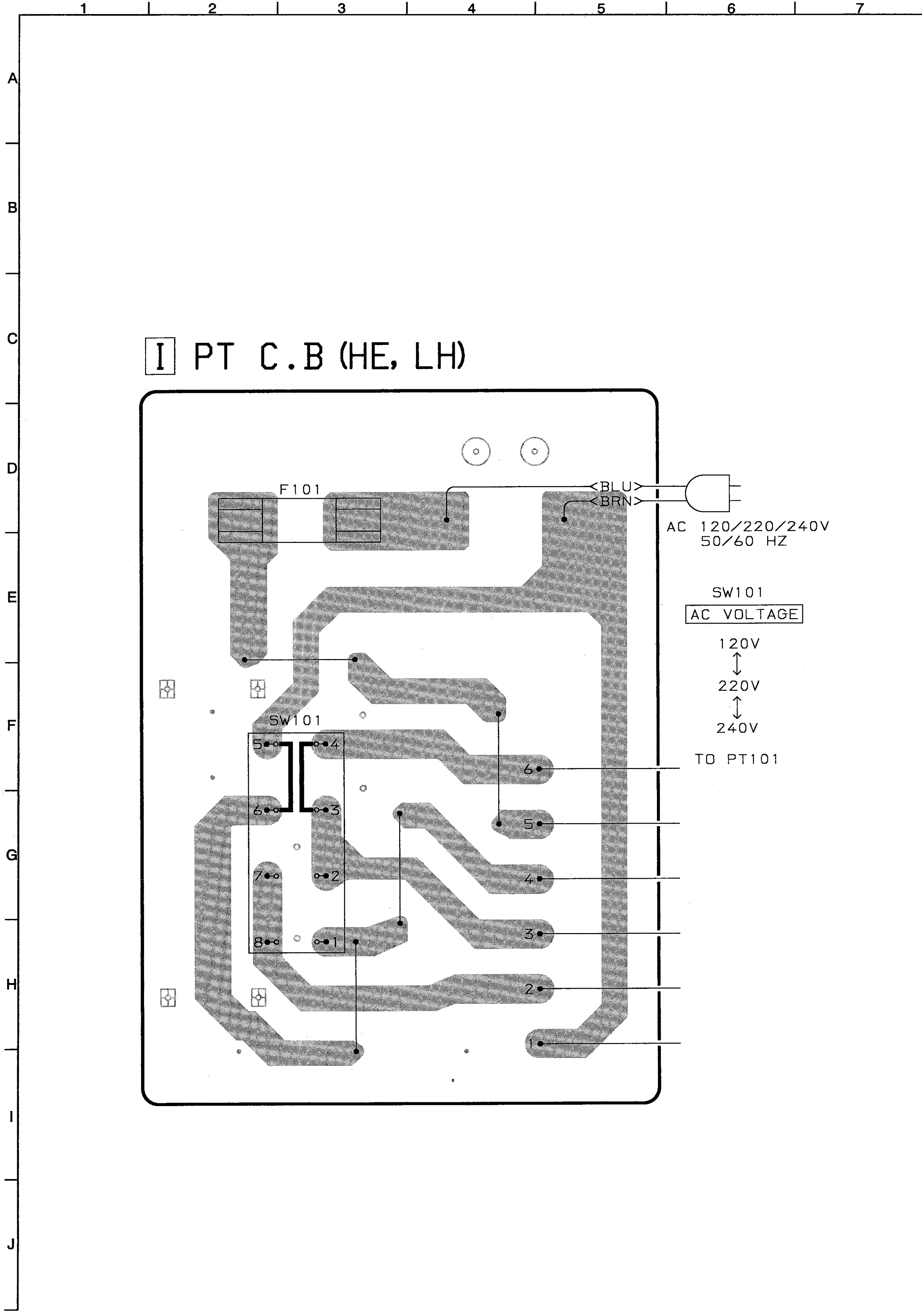




SCHEMATIC DIAGRAM – 5 (DSP)



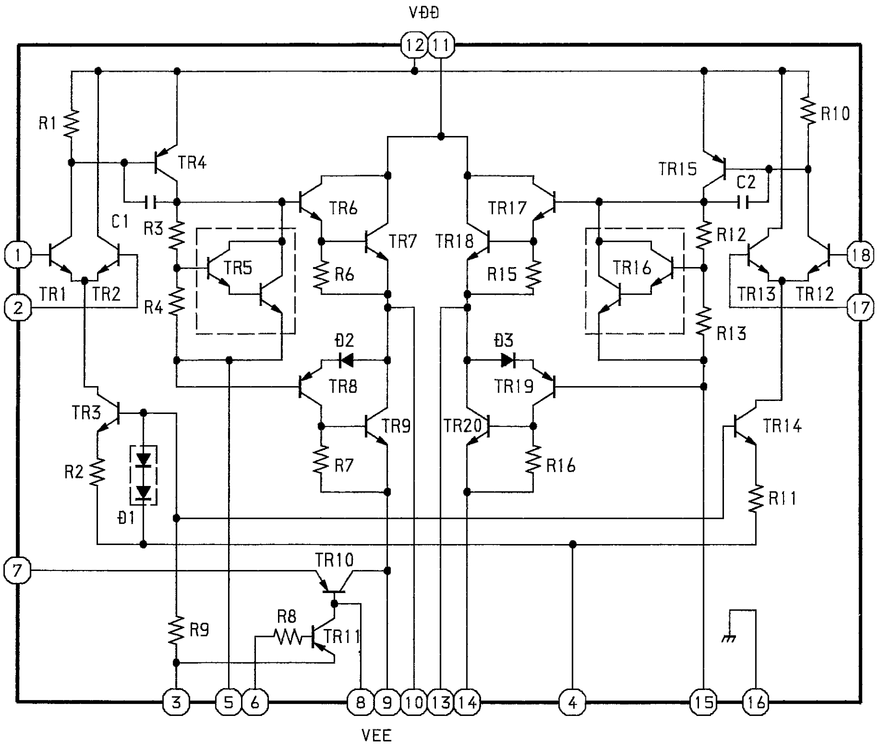
WIRING – 6 (PT)



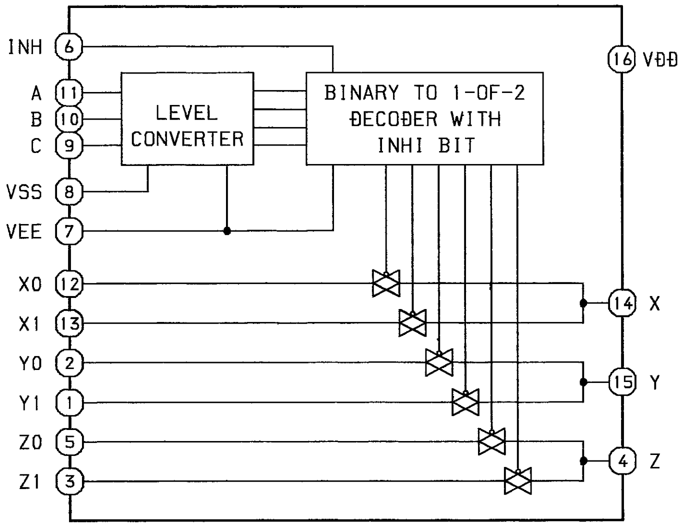
I PT C.B (HE, LH)

IC BLOCK DIAGRAM

IC,STK4152-2 < HE,G,LH >



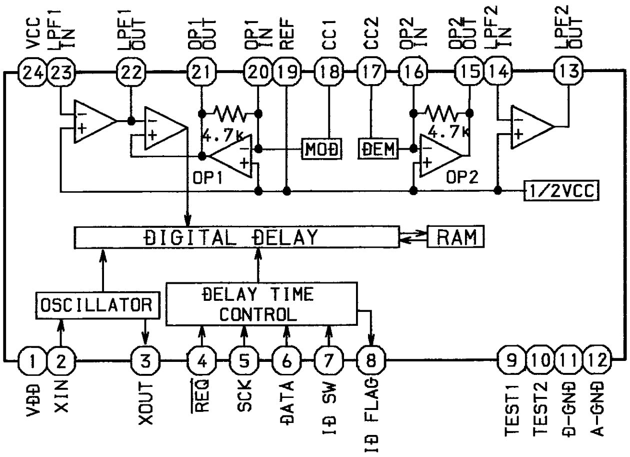
IC,MC14053BF



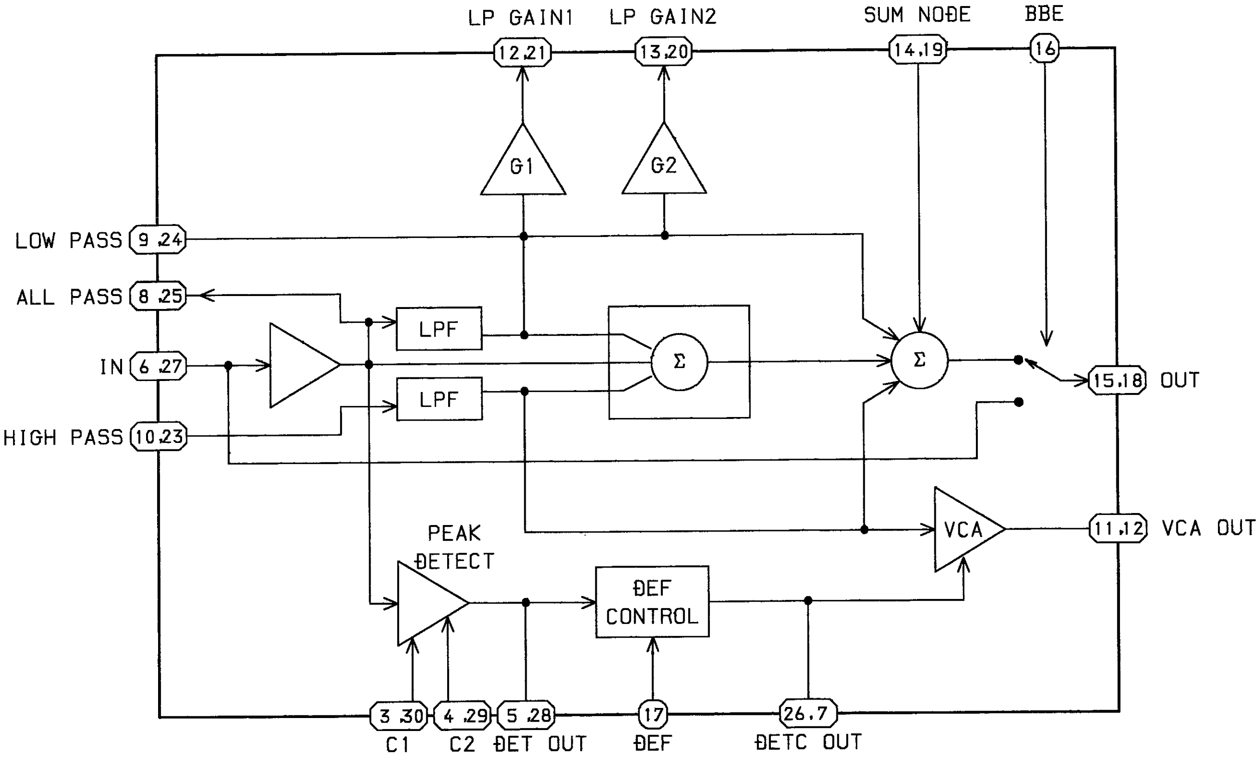
LOGIC TABLE

CONTROL INPUT				ON SWITCHS		
INHI BIT	SELECT					
	C	B	A	MC14053BF		
0	0	0	0	Z0	Y0	X0
0	0	0	1	Z0	Y0	X1
0	0	1	0	Z0	Y1	X0
0	0	1	1	Z0	Y1	X1
0	1	0	0	Z1	Y0	X0
0	1	0	1	Z1	Y0	X1
0	1	1	0	Z1	Y1	X0
0	1	1	1	Z1	Y1	X1
1	X	X	X	NONE		

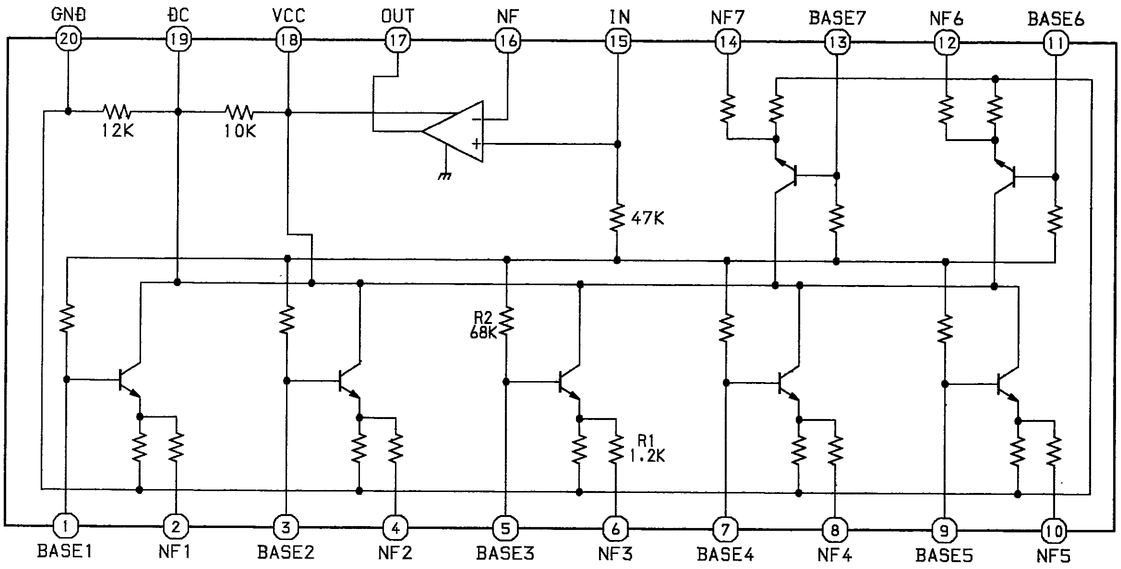
IC,M65830P



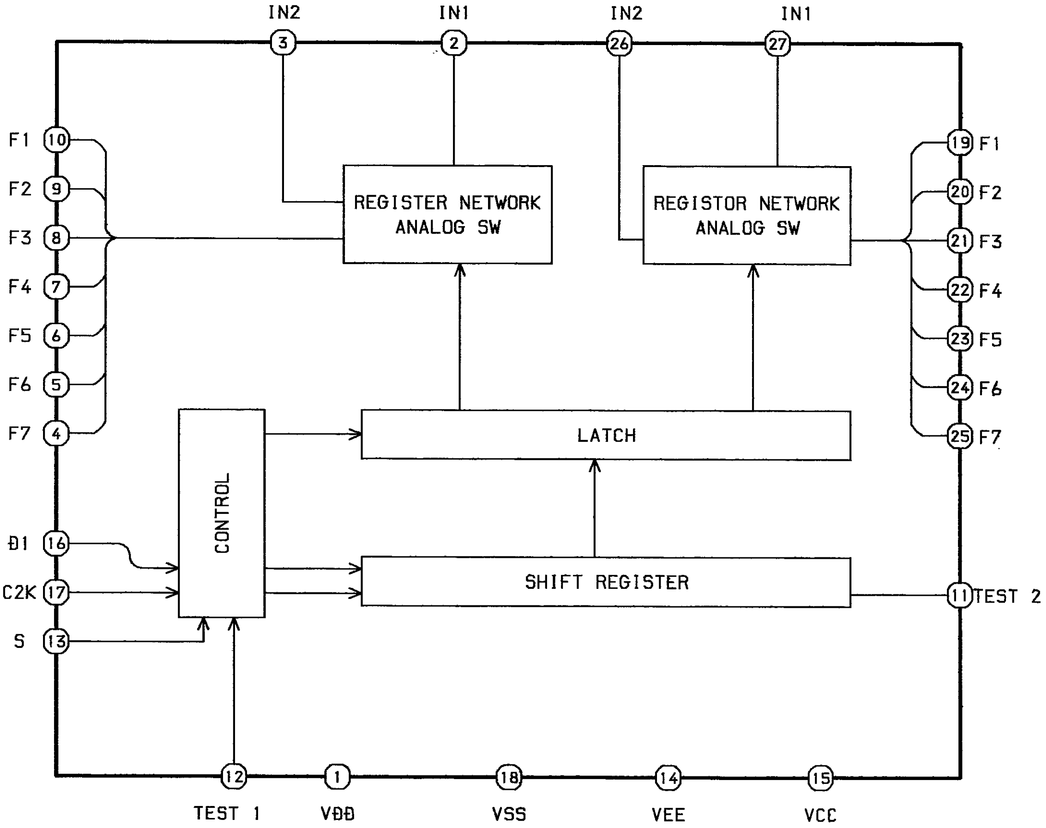
IC,XR1071CP



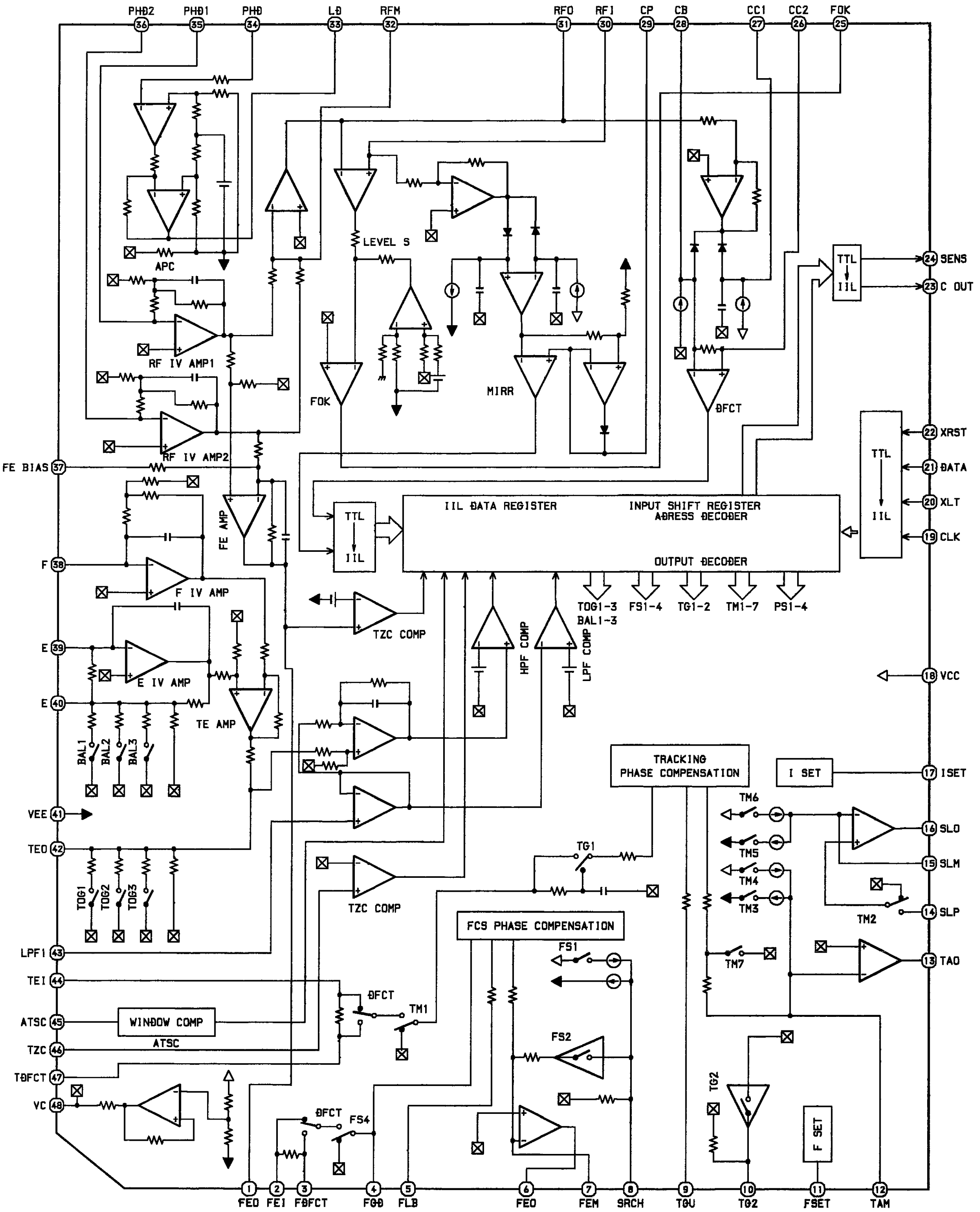
IC,LA3607



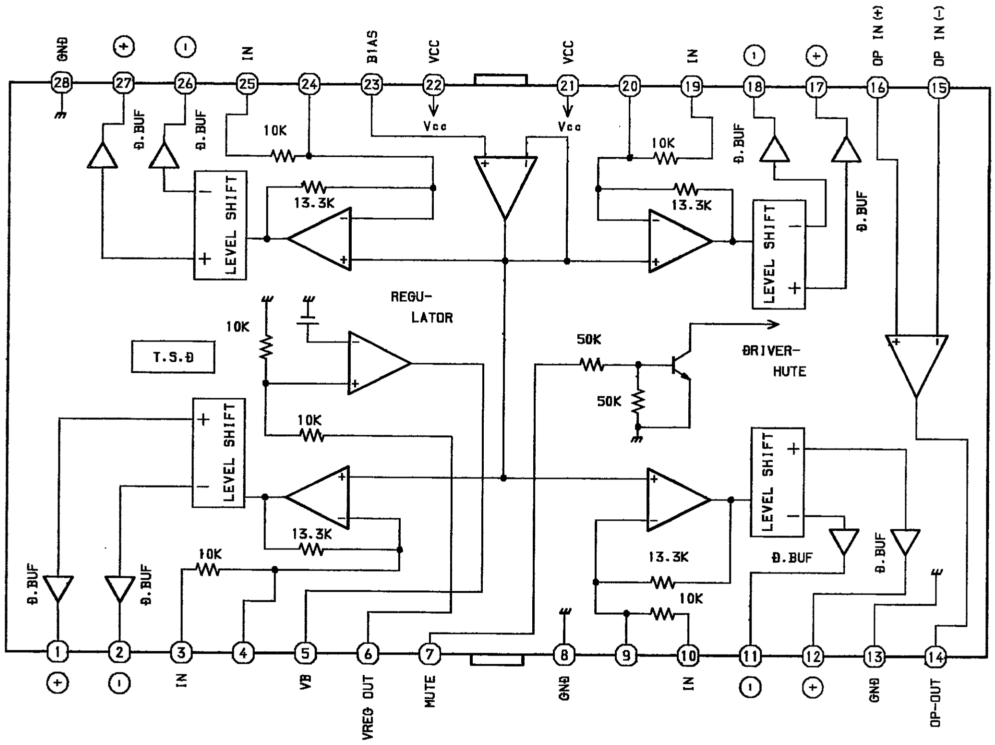
IC,LC7522



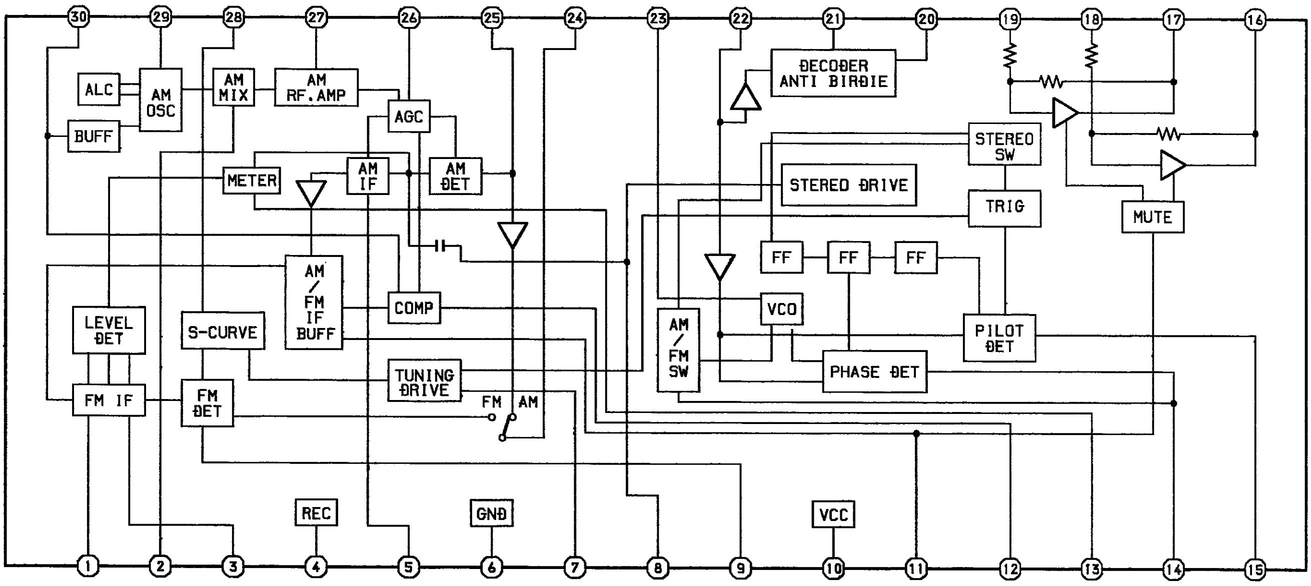
IC,CXA1782BQ



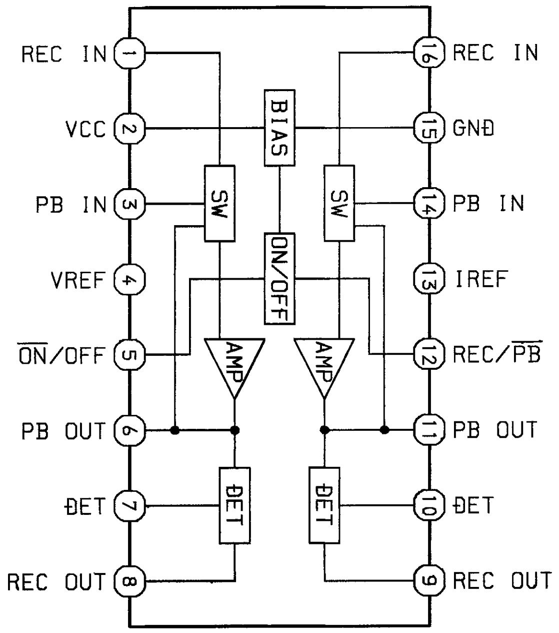
IC,BA6397FP



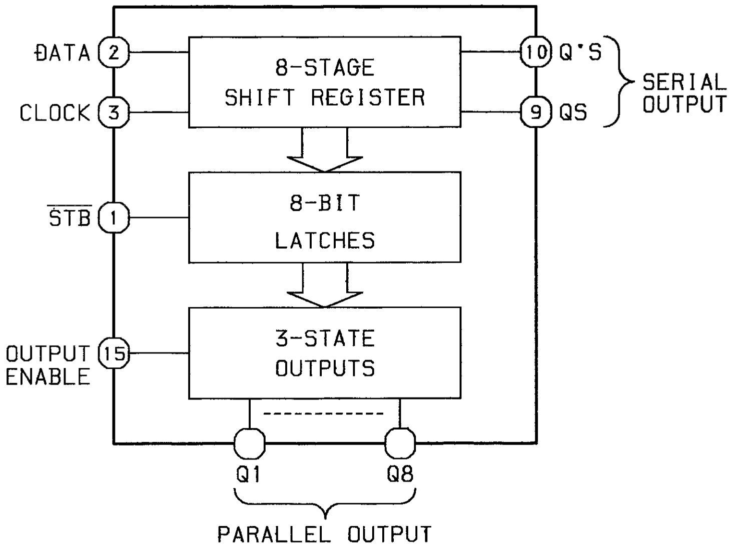
IC,LA1836



IC,HA12134A



IC,BU4094B
IC,BU4094BF

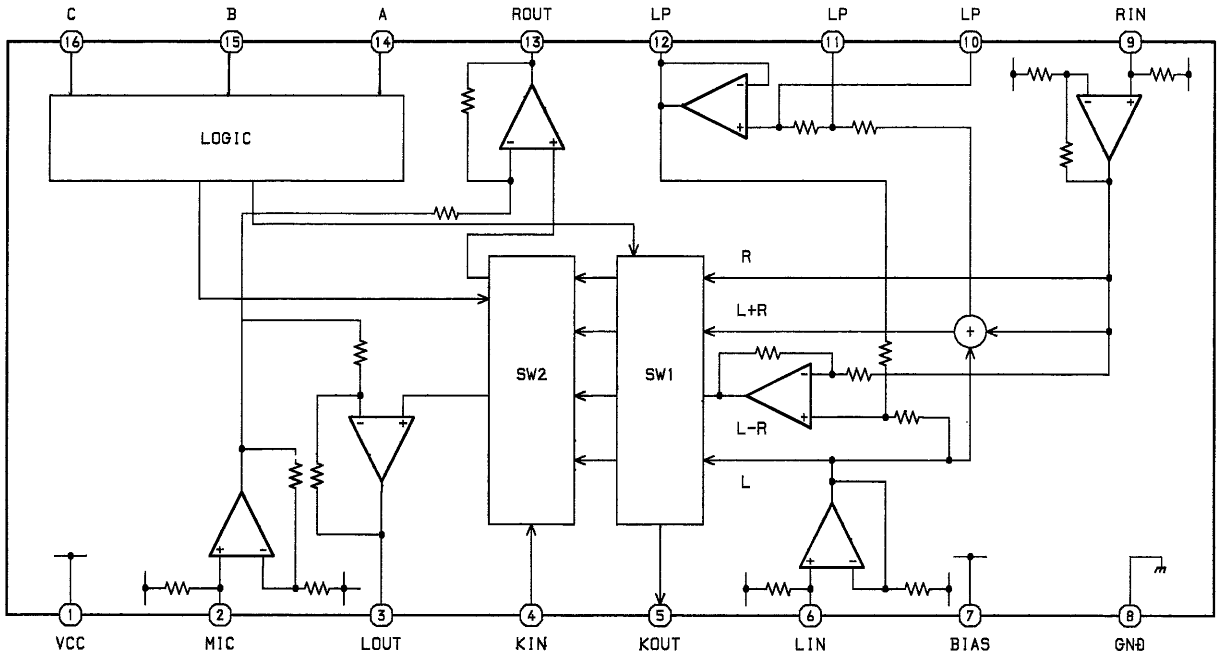


TRUTH TABLE

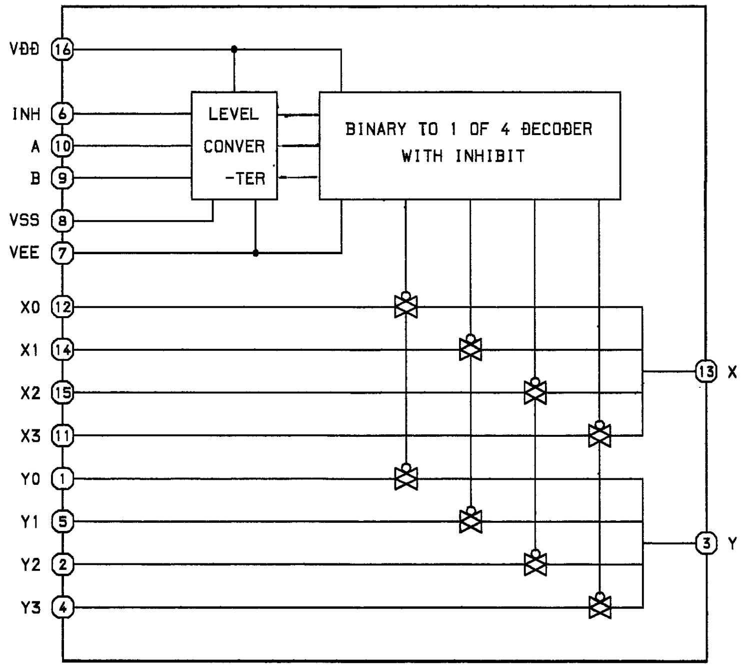
CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	QS	Q'S
↑	L	X	X	Z	Z	Q7	NO CHG.
↓	L	X	X	Z	Z	NO CHG.	QS
↑	H	L	X	NO CHG.	NO CHG.	Q7	NO CHG.
↑	H	H	L	L	Qn−1	Q7	NO CHG.
↑	H	H	H	H	Qn−1	Q7	NO CHG.
↓	H	X	X	NO CHG.	NO CHG.	NO CHG.	QS

Z = HIGH IMPEDANCE
X = DON'T CARE

IC,BA3837



IC,BU4052B
IC,BU4052BF

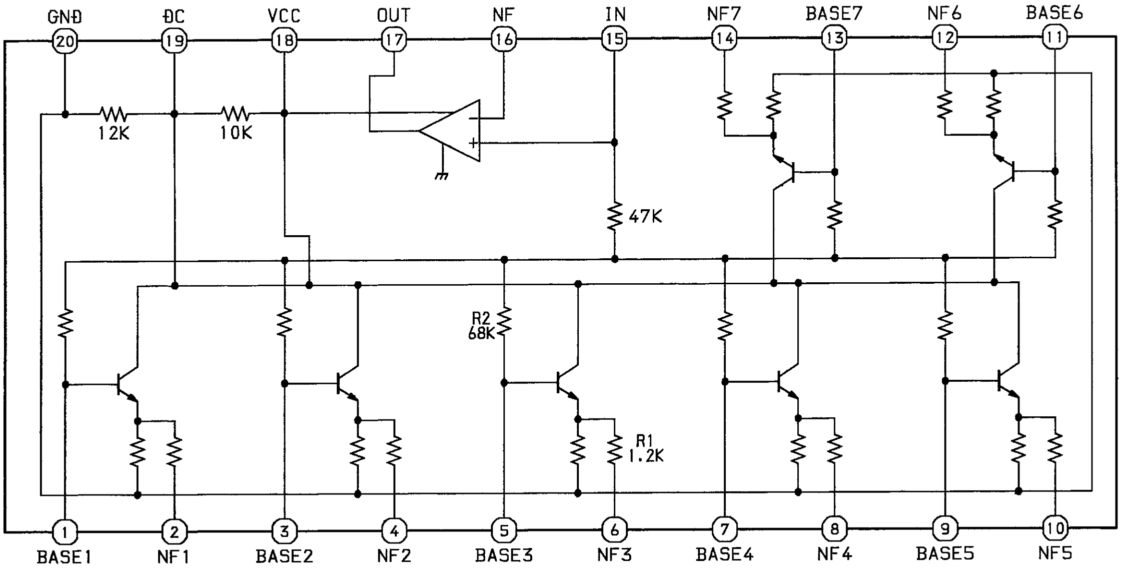


TRUTH TABLE

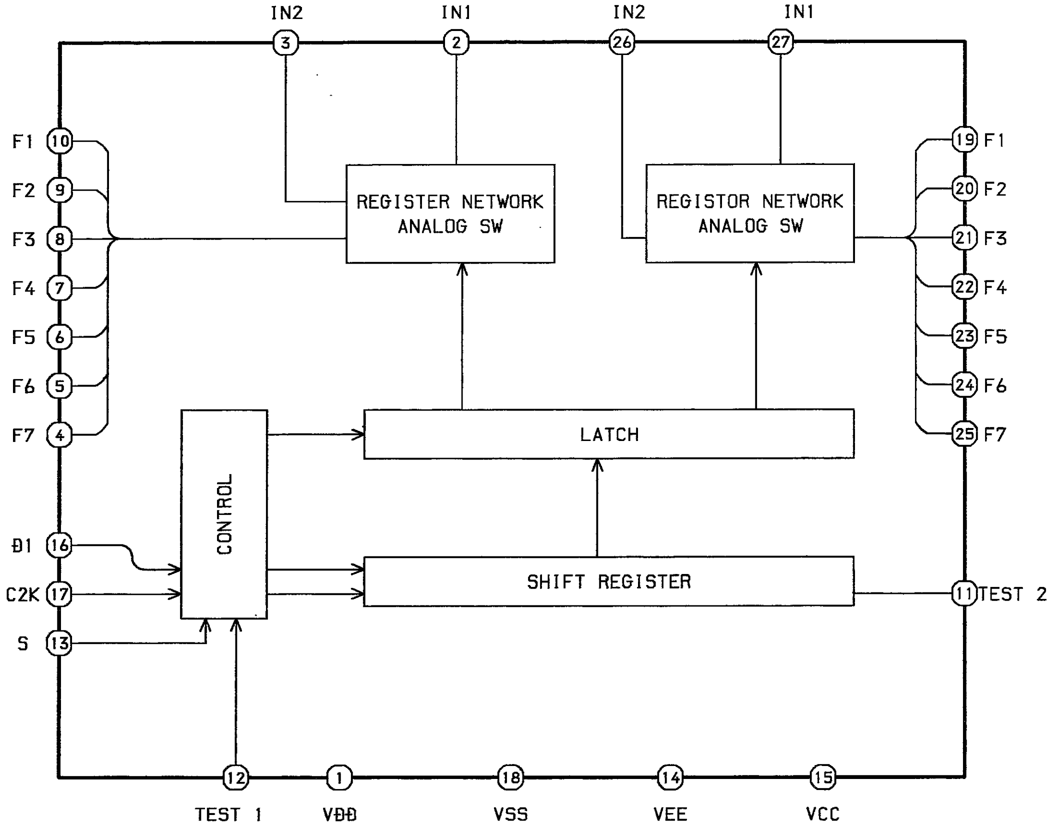
INHIBIT	A	B	ON SWITCH
L	L	L	X0.Y0
L	H	L	X1.Y1
L	L	H	X2. Y2
L	H	H	X3. Y3
H	×	×	NONE

×=Don't Care

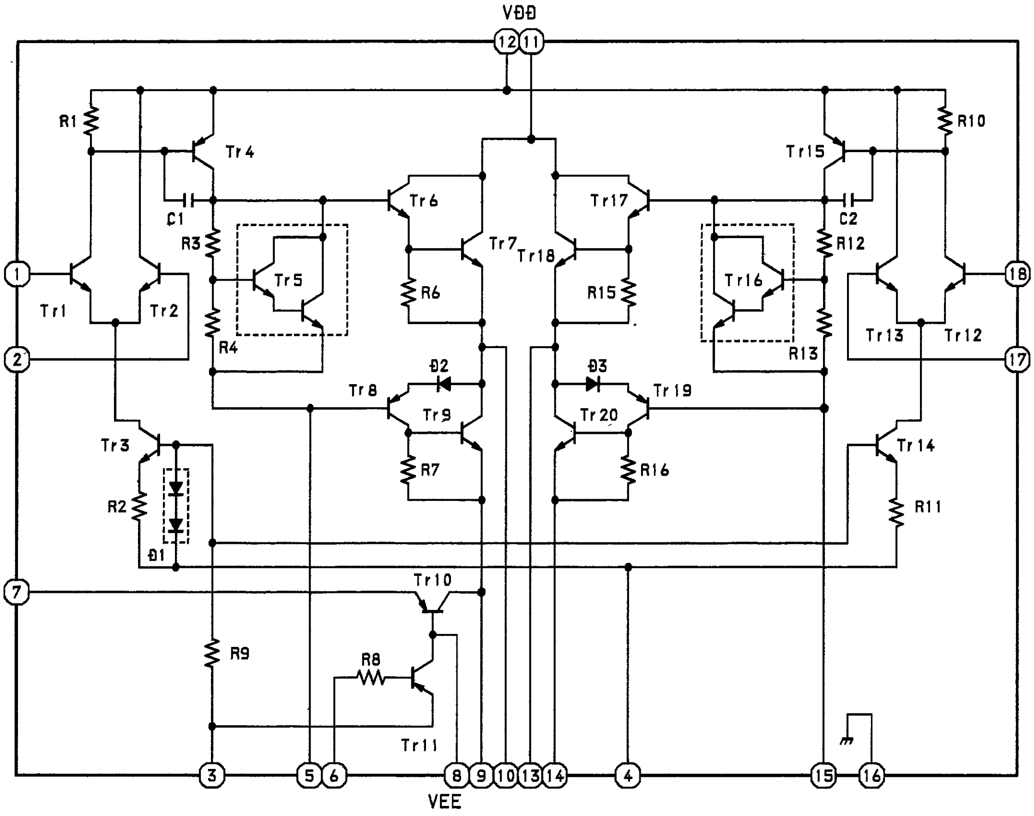
IC,LA3607



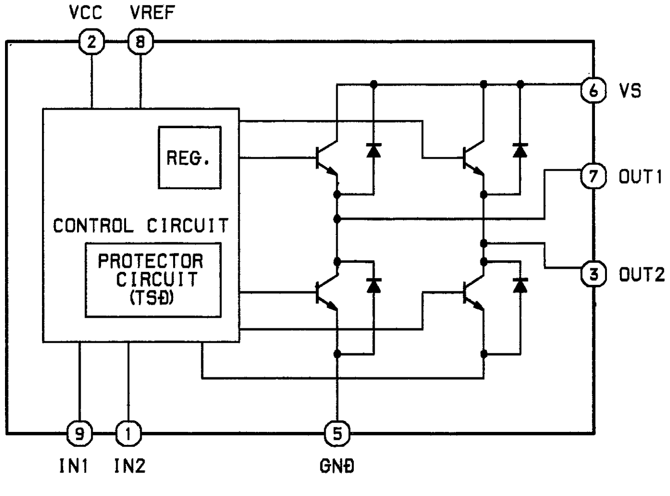
IC,LC7522



IC,STK4142-MK2 < EE,K,EZ,Z >



IC,TA7291S



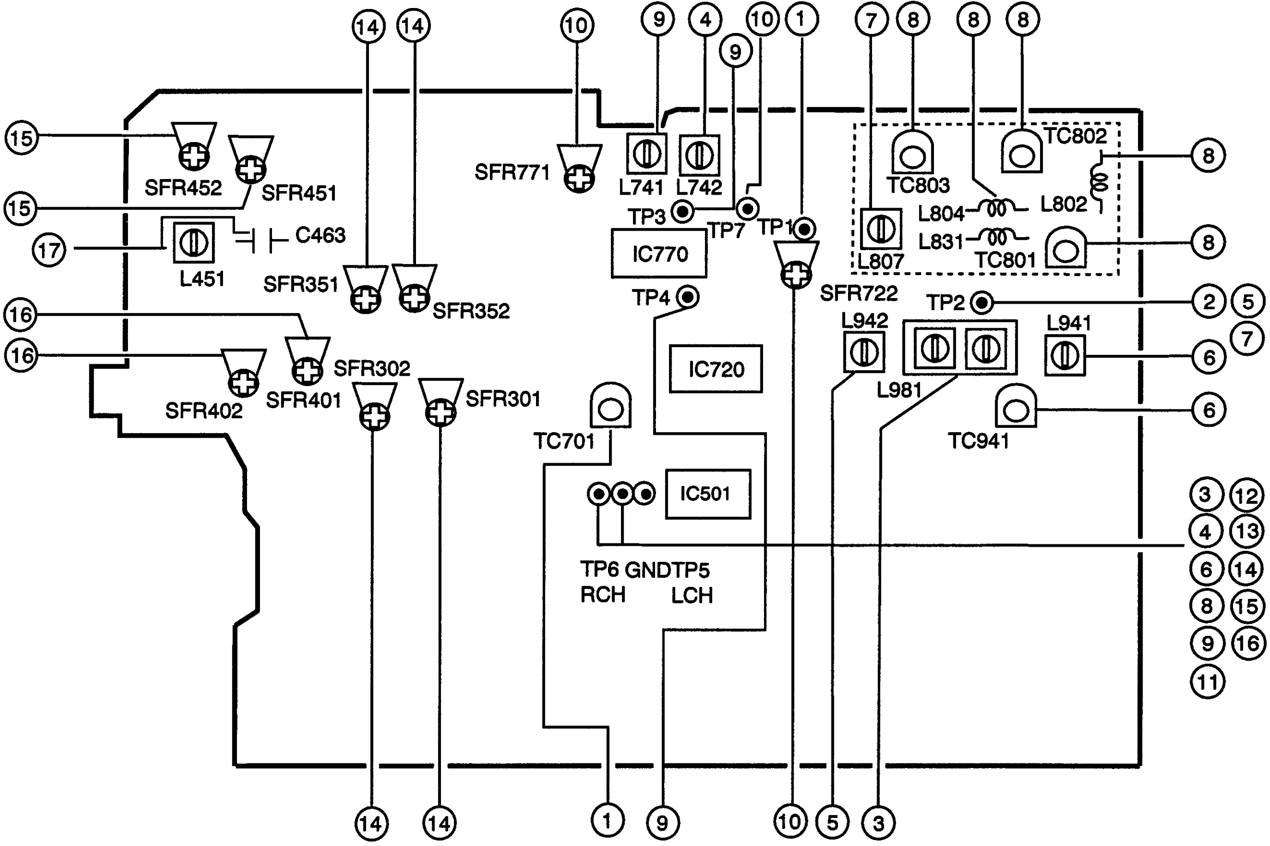
TRUTH TABLE

INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW
0	1	L	H	CCW
1	1	L	L	BRAKE

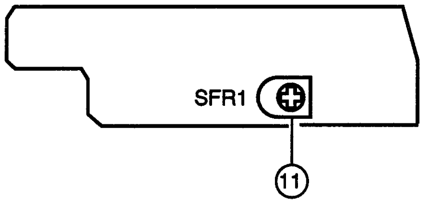
∞ : HI IMPEDANCE
NOTE : INPUT "H" ACTIVE

ADJUSTMENT -1 <TUNER, DECK>

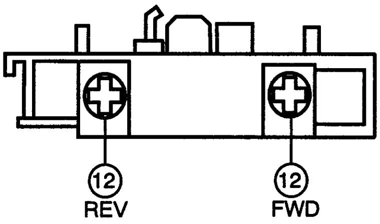
A MAIN C.B



F DECK-2 C.B



DECK-1 P, DECK-2 R / P / E HEAD



< TUNER SECTION >

1. Clock Frequency Adjustment
   Settings : •Test point : TP1 (CLK IC770 pin30)
   •Adjutment location : TC701
   Method : Set to MW 1602kHz (HE,G,EE,K,EZ,Z), 1710kHz (LH) and adjust TC701 so that the test point become 2052kHz ± 0.01kHz (HE,G,EE,K,EZ,Z), 2160kH ± 0.01 (LH).

2. MW VT Check
   Settings : •Test point : TP2 (VT)
   Method : Set to MW 1602kHz (HE,G,EE,K,EZ,Z), 1710kHz (LH) and check that the test point is 7.0V ± 10V (HE,G,EE,K,EZ,Z),7.2V ± 1.0V (LH).

3. MW Tracking Adjustment
   Settings : •Test point : TP5,TP6
   •Adjustment location : L981
   Method : Set to MW 999kHz (HE,G,EE,K,EZ,Z), 1000kHz (LH) and adjust L981 that the test point becomes maximum.

4. AM IF Adjustment
   Settings : •Test point : TP5,TP6
   L742...450kHz

5. LW VT Adjustment (EE,K,EZ,Z only)
   Settings : •Test point : TP2
   •Ajustment location : L942
   Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.50V±0.05V.

6. LW Tracking Adjustment (EE,K,EZ,Z only)
   Settings : •Test point : TP5,TP6
   •Adjustment location :
   L941..144kHz
   TC941..290kHz
   Method : Set up TC942 to center before adjustment. The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX by TC941.

7. FM VT Adjustment
   Settings : •Test point : TP2 (VT)
   •Adjustment location : L807
   Method : Set to FM 87.5MHz and adjust L807 so that the test point becomes 1.7V±0.05V.

8. FM Tracking Adjustment
   Settings : •Test point : TP5,TP6
   TC801,TC802,TC803..108MHz
   L802,L804,L831...87.5MHz

9. DC Balance/MONO Distortion Adjustment
   Settings : •Test point : TP3,TP4 (DC Balance)
   TP5,TP6 (Distortion)
   •Adjustment location : L741
   •Input level: 54dB
   Method : Set to FM 98.0MHz and adjust L741 so that voltage between TP3 and TP4 becomes 0V ±0.04V. Next check the distortion is less than 1.3%.

10. Auto stop Level Adjustment
    FM
    Settings : •Test point : TP7
    •Adjustment location : SFR772
    •Input signal : 23dB
    Method : Set to FM 98.0 MHz and adjust voltage low (about 0.01V) by SFR722. After that voltage high (about 7.0V) out by 2dB down.
    AM
    Setting : •Test point : TP7
    •Adjustment Location : SFR771
    •Input level : 50dB
    Method : Set to AM 999kHz (HE,EE,K,EZ,Z), 1000kHz (LH) and adjust voltage low (about 0.01V) by SFR771. After that voltage high (about 7.0V) out by 2dB down.

< TAPE SECTION >

11. Tape Speed Adjustment
    Settings : •Test tape : TTA-100
    •Test point : TP5,TP6
    •Adjutment location : SFR1
    Method : Play back the test tape DECK 2 and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz.

12. Head Azimuth Adjustment
    Settings : •Test tape : TTA-310
    •Test point : TP5,TP6
    •Adjustment location : Head azimuth adjustment screw
    Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

13. PB Frequency Response Check (DECK1,DECK2)
    Settings : •Test tape : TTA-310
    •Test point : TP5,TP6
    Method : Play back the 315Hz and10kHz signals of the test tape and check that the output ratio of the 10kHz signals is with respect to that of the 315Hz signal is ± 2dB.

14. PB Sensitivity Adjustment
    Settings : •Test tape : TTA-200
    •Test point : TP5,TP6
    •Adjustment location : SFR301 (DECK1, Lch)
    SFR302 (DECK1, Rch)
    SFR351 (DECK2, Lch)
    SFR352 (DECK2, Rch)
    Method : Play back the test tape and adjust SFR so that the output level of the test point becomes 60mV.

15. REC/PB Frequency Response Adjustment
    Settings : •Test tape : TTA-601
    •Test point : TP5,TP6
    •Input signal : 1kHz/10kHz (LINE IN)
    •Adjustment location : SFR451(Lch)
    SFR452 (Rch)
    Method : Apply 1kHz signal and REC mode. Then adjust attenuator so that the level at the TP5,TP6 becomes 4.2mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output level of 1kHz and 10kHz signals becomes 3.2mV ± 0.5dB .

16 REC/PB Sensitivity Adjustment
   Settings : •Test tape : TTA-601
   •Test point : TP5,TP6
   •Input signal : 1kHz (LINE IN)
   •Adjustment location : SFR401(Lch)
   SFR402 (Rch)
   Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the level at the TP5,TP6 becomes 4.2mV. Record and play back the 1kHz and adjust SFRs so that the output becomes 3.2mV+0.5dB.

17 Bias OSC Frequency Adjustment
   Setting : •Test tape : TTA-601
   •Test point : TP Bias (C463)
   •Adjustment location : L451
   Mehtod: Set to the REC mode, adjust L451 so that the frequency counter of the test point reads 85kHz ± 2kHz.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity:	4dB ± 6dB (Except EZ,Z)
(THD 3%)	(at 87.5, 98.0, 108.0MHz)
	7dB ± 6dB (EZ,Z)
	(at 87.5, 98.0, 108.0MHz)
S/N 50dB Quieting sensitivity:	
	30dB ± 5dB (HE,G,LH)
	(87.5,98.0,108.0MHz)
S/N 46dB Quieting sensitivity:	
	35dB±6dB (EE,K,EZ,Z)
	(at 87.5,98.0,108.0MHz)
Signal to noise ratio:	More than 64dB
	(98.0MHz)
Distortion:	Less than 1.2%
	(98.0MHz)
Stereo separation:	More than 20dB (98.0MHz)
Intermediate frequency:	10.7MHz

<AM(MW) SECTION>

Sensitivity:	55 dB ± 7dB at 600kHz (LH)
(S/N 20dB)	55 dB ± 7dB at 603kHz
	(HE,G,EE,K,EZ,Z)
	53dB ± 6dB at 1000/1400kHz (LH)
	53dB ± 6dB at 999/1404kHz
	(HE,G,EE,K,EZ,Z)
Distortion:	Less than 1.5% at 1000kHz (LH)
	Less than 1.5% at 999kHz
	(HE,G,EE,K,EZ,Z)
Intermediate frequency:	450kHz

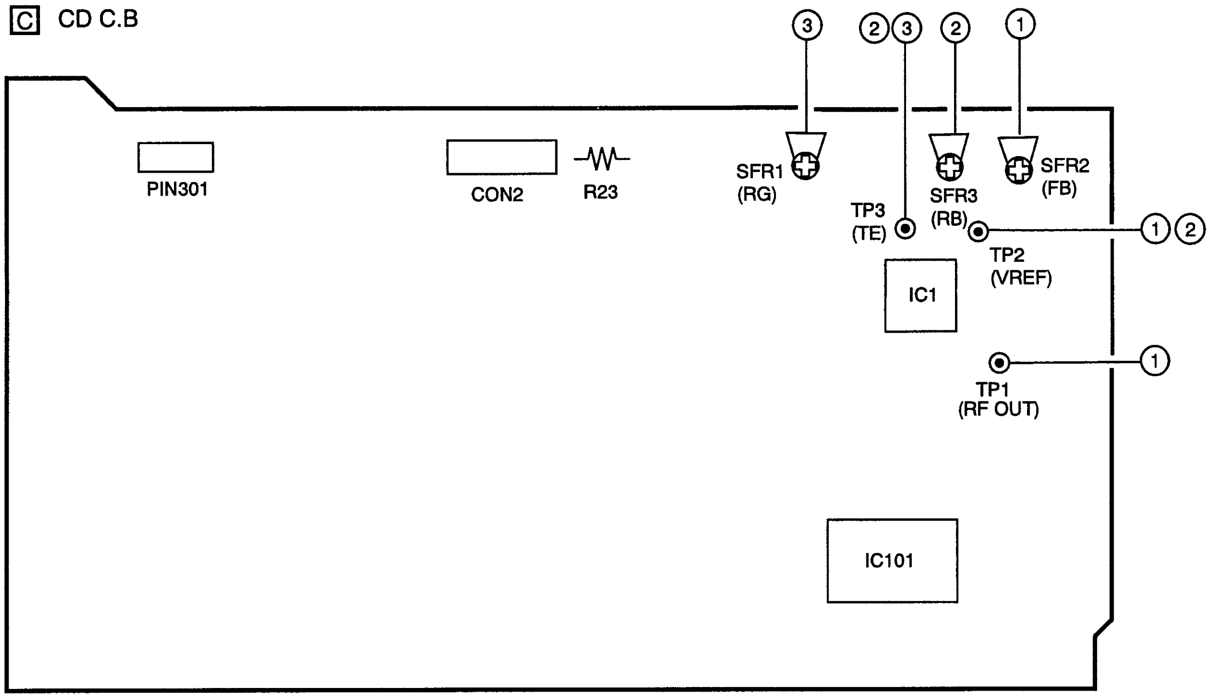
<LW SECTION> (EE,K,EZ,Z ONLY)

Sensitivity:	66dB ± 5dB (at 144kHz)
(S/N 20dB)	63dB ± 5dB (at 198kHz)
	62dB ± 5dB (at 290kHz)
Distortion:	Less than 1.5% (at 198kHz)
Intermediate frequency:	450kHz

<DECK SECTION>

Tape speed:	3000Hz ± 45Hz
Wow & flutter:	Less than 0.35% (W.R.M.S)
Take-up torque:	30 ~ 55g-cm (FWD, REV)
F.F & REW torque:	75 ~ 170g-cm
Back tension:	2 ~ 6g-cm (FWD, REV)
PB Output levrl:	2.9V ± 1.5dB(SP OUT)
REC/PB Output level:	1.6V ± 2.0dB(SP OUT)
Distortion (REC/PB):	Less than 2.0% (NORM, CrO2)
Noise level(PB):	Less than 100mV/150mV
	(DOLBY NR ON/OFF
	CrO2. Vol MAX.)
	Less than 130mV/200mV
	(DOLBY NR ON/OFF
	NORM. Vol MAX.)
Noise level(REC/PB):	Less than 3.3mV/7.5mV
	(DOLBY NR ON/OFF
	CrO2. Vol 2V)
	Less than 4mV/12mV
	(DOLBY NR ON/OFF
	NORM. Vol 2V)
Crosstalk:	More than 60dB(1kHz, 0VU)
Channel separation:	More than 48dB(1kHz, 0VU)
Erasing ratio:	More than 60dB (at 125Hz)
REC bias frequency:	85kHz
Test tape:	NORMAL: TTA-601
	(TTA-119K)
	CrO2.: TTA-610
	(TTA-119H)

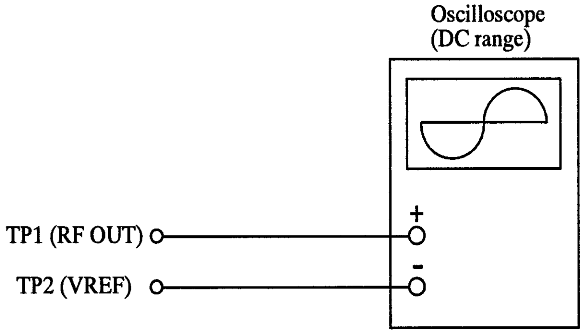
ADJUSTMENT- 2 <CD>



Note :
Connect a probe (10:1) of the osiloscope or the frequency counter to a test point.

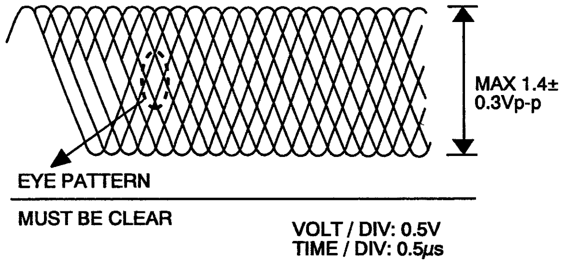
< CD SECTION >:

1. Focus Bias Adjustment
   Make the focus bias adjustment when replacing and repairing the optical block.

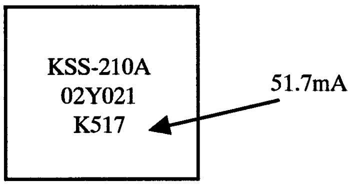


1) Connect an oscilloscope to the test points TP1 (RF OUT) and TP2 (VREF).
2) Turn on the power switch.
3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4) Adjust SFR2 so that RF signal of the test point TP1 (RF OUT) is MAX and CLEARREST.

RF signal waveform

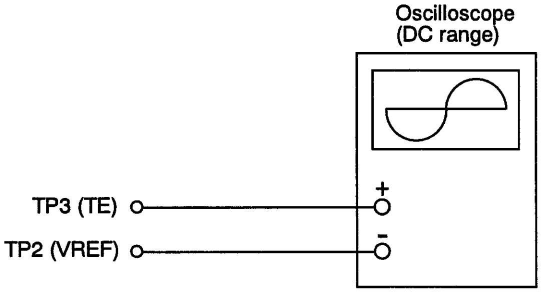


Note:
The current of the laser signal can be checked with th voltage on both sides of R23 (10Ω).The difference for the specified value shown on the level must be within ± 6.0mA

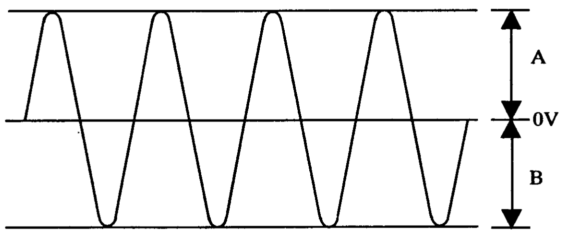


$$\text{Laser current Iop} = \frac{\text{Voltage across R23}}{10\Omega}$$

2. Tracking Balance Adjustment



1) Connect an oscilloscope to the test points TP3 (TE) and TP2 (VREF).
2) Turn on the power switch.
3) Insert test disc TCD-782 (YEDS-18) and press the PLAY button.
4) Connect the intermediate point of SFR1 to TP2 (VREF)
5) Adjust SFR3 so that the waveform on the oscilloscope is vertically symmetrical as figure shown in the figure below.
6) After the adjustment is completed,remove the connected lead wires from the terminals.



A=B

VOLT / DIV: 200mV
TIME / DIV: 1mS

3. Tracking Gain Adjustment
A servo analyzer is necessary in order to perform this adjustment exactly. However, this gain has a margin, so even if it is slighly off, there is no problem. Therfore, do not perform this adjustment. Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechinical shock when 2-axis device operates. However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise increases when the 2-axis device opearates increases.

- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

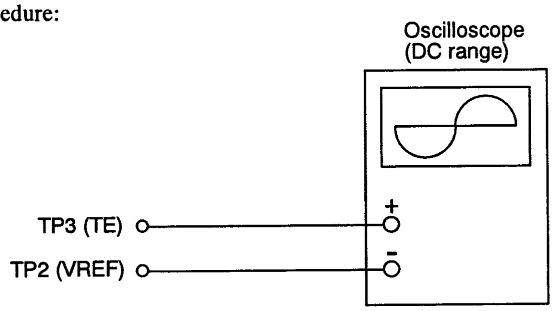
When gain adjustment is off, the symptoms below appear.

Symptoms \ Gain	(Focus)	Tracking
•The time until music starts becomes longer for STOP PLAY or automatic selection (⏮ ⏭buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
•Music does not start and disc continues to rotate for STOP PLAY or autmatic selection (⏮ ⏭buttons pressed.)	–	low
•Disc stops to rotate shortly after STOP → PLAY.	low or high	–
•Sound is interrupted during PLAY, or time counter display stops.	–	low
•More noises during the 2-axis device opration.	high	high

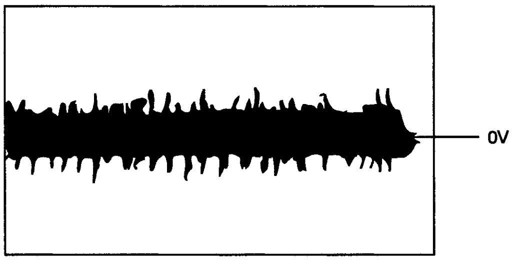
The following is simple adjustment method.

= Simple adjustment =
Note: Since exact adjustment cannot be performed, remember the positions of the controls before the performing the adustment.
If the positions after the simple adjustment are only a little different, return the controls to the original position.

Procedure:



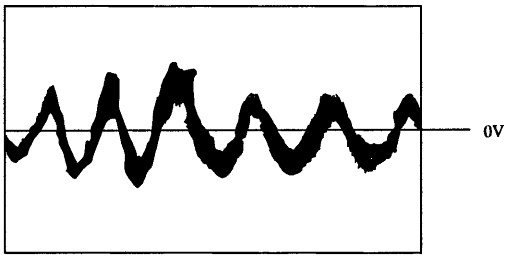
1) Keep the set horizontal. (If the set is not kept horizontally, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2) Inset test disc TCD-782 and play back the second composi tion.
3) Connect an oscilloscope to TP3 (TE) of the CD C.B.
4) Adjust SFR1 so that the waveform appears as shown in the figure below.(tracking gain adjustment)



VOLT / DIV: 50mV
TIME / DIV: 1mS

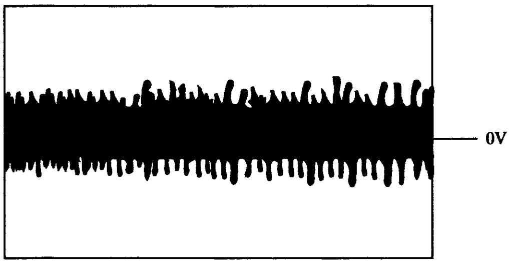
- Incorrect example

Low tracking gain
(The fundamental wave appears as compared with the waveform adjusted)



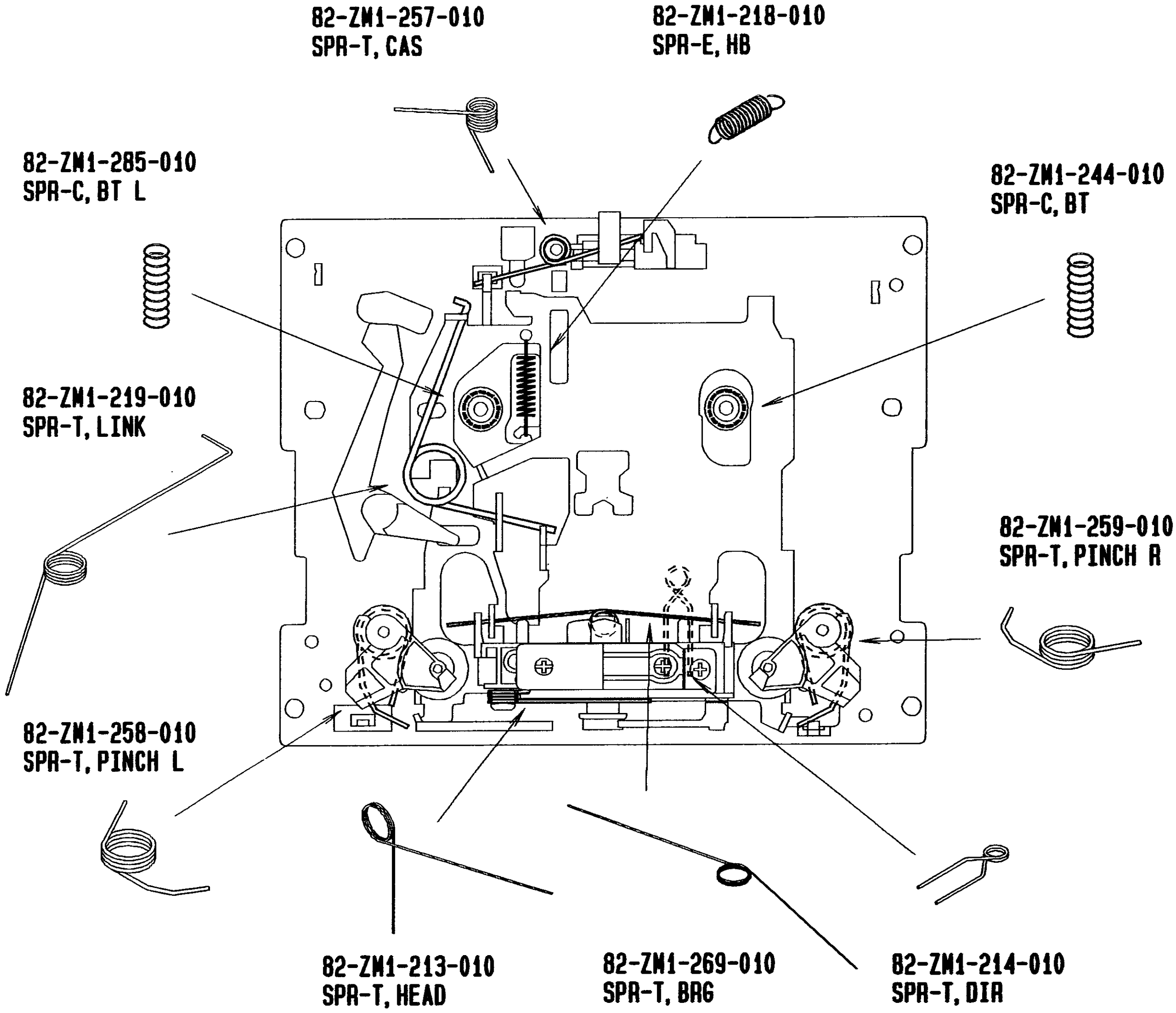
VOLT / DIV: 50mV
TIME / DIV: 1mS

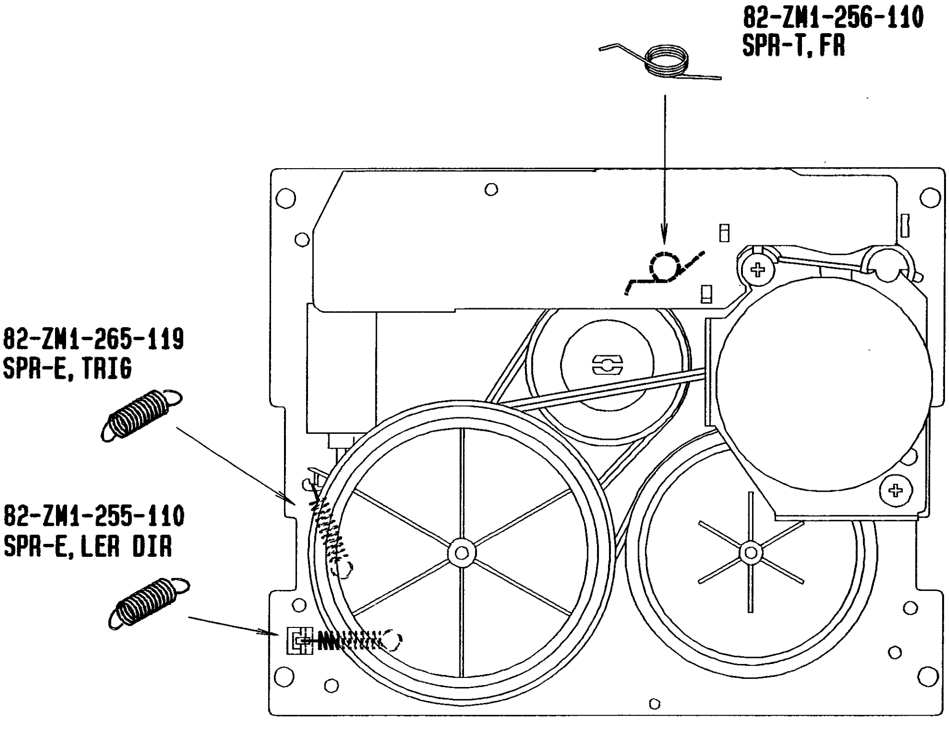
High tracking gain
(The frequency of the fundamental wave is higher than in low gain)



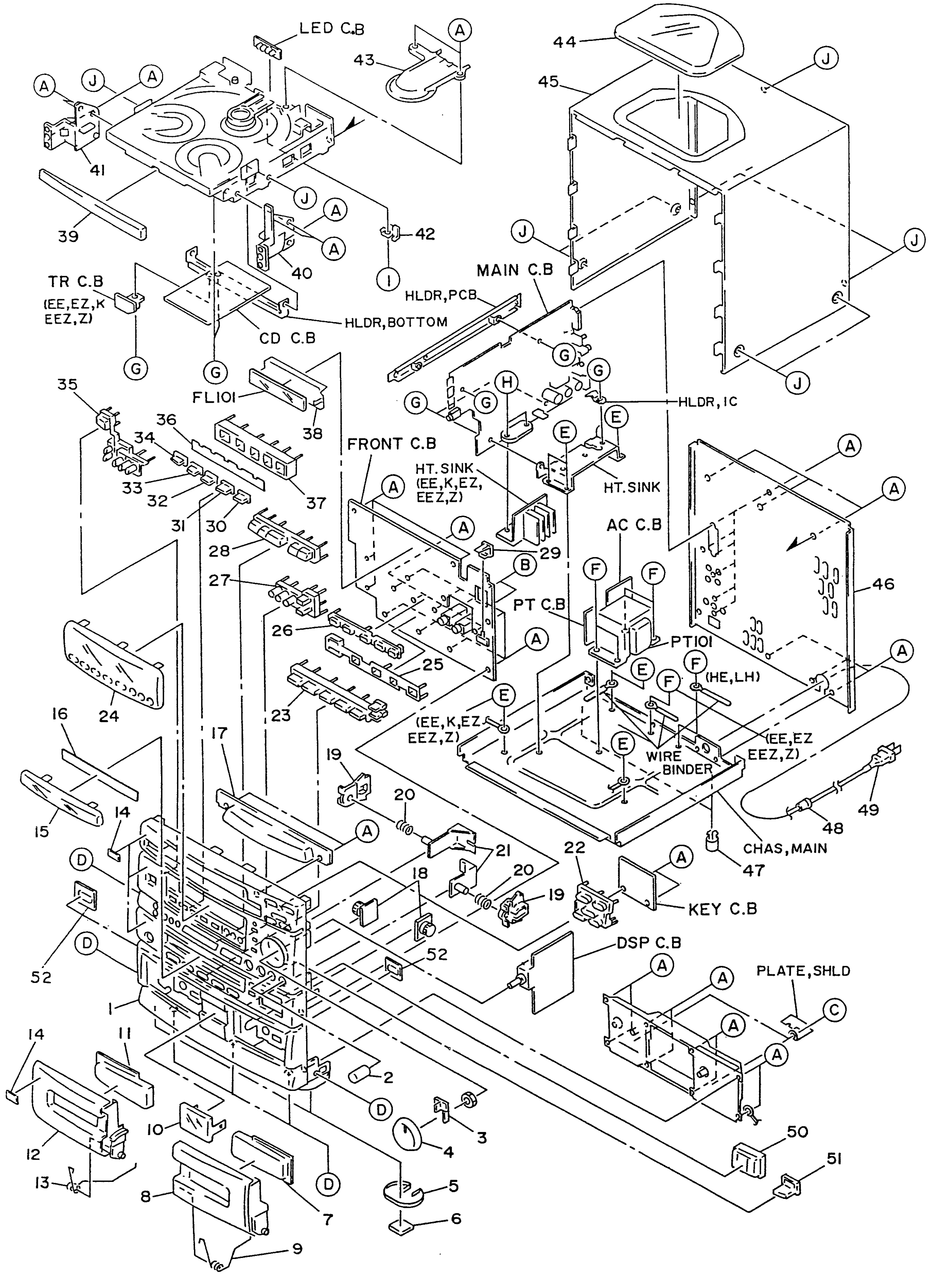
VOLT / DIV: 50mV
TIME / DIV: 1mS

SPRING APPLICATION POSITION





MECHANICAL EXPLODED VIEW 1 / 2



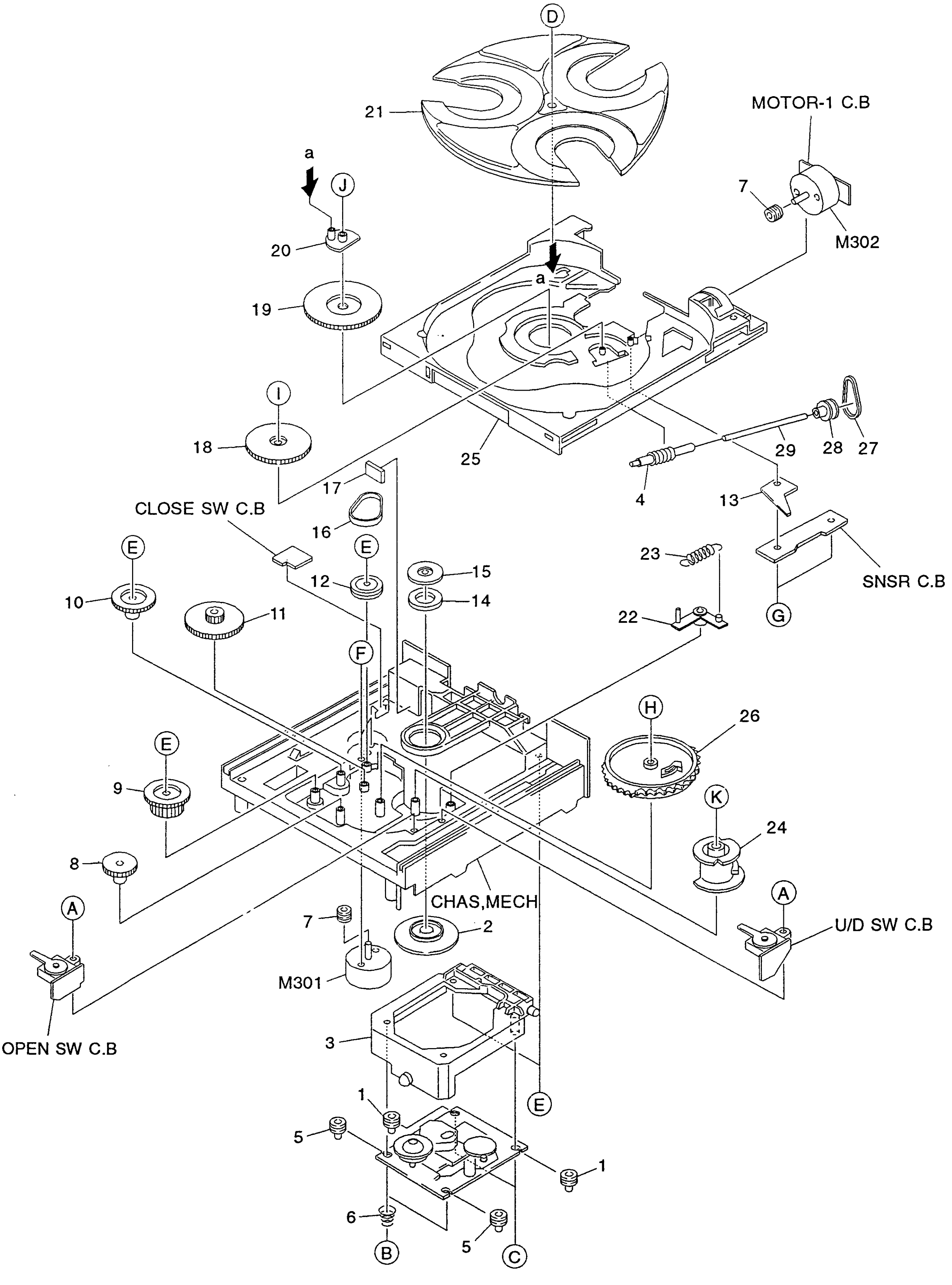
MECHANICAL PARTS LIST 1 / 2

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	84-MA1-003-019		CAB,FR E<EE,K,EZ,EEZ>
1	84-MA1-001-019		CAB,FR H<HE>
1	84-MA1-004-019		CAB,FR LH<LH>
1	84-MA1-002-019		CAB,FR Z<Z>
2	81-MX4-019-019		KNOB,MIC
3	84-MA1-051-019		IND,VOL
4	84-MA1-049-019		KNOB,VOL
5	81-MA1-022-019		PLATE,FOOT
6	83-MA1-203-019		FELT,15-20-2 LEG
7	84-MA1-068-019		WINDOW,CASS R
8	84-MA1-018-019		BOX,CASS R
9	82-NF5-219-019		SPR-T,EJECT 2(SIN)
10	84-MA1-069-019		WINDOW,CL
11	84-MA1-067-019		WINDOW,CASS L
12	84-MA1-017-019		BOX,CASS L
13	82-NF5-218-019		SPR-T,EJECT 1(SIN)
14	82-NE8-032-019		BADGE,AIWA 27.5
15	84-MA1-074-019		WINDOW,GEQ
16	84-MA1-082-019		PLATE,GEQ
17	84-MA1-077-019		WINDOW,CD
18	87-063-165-019		OIL-DMPR 150
19	82-NF5-229-019		PLATE,LOCK
20	82-NF5-228-019		SPR-C,LOCK
21	84-MA1-211-019		HLDR,LOCK
22	84-MA1-021-019		KEY,CD
23	84-MA1-037-019		KEY,GEQ
24	84-MA1-071-019		WINDOW,AMP
25	84-MA1-616-019		GUIDE,GEQ
26	84-MA1-617-019		GUIDE,PLAY
27	84-MA1-024-019		KEY,DSP
28	84-MA1-032-019		KEY,PLAY
29	82-MA2-036-019		KNOB,SLIDE DE
30	84-MA1-064-019		BTN,FN CD
31	84-MA1-063-019		BTN,FN AUX
32	84-MA1-062-019		BTN,FN PHONO
33	84-MA1-061-019		BTN,FN TUNER
34	84-MA1-060-019		BTN,FN TAPE
35	84-MA1-029-019		KEY,POWER
36	84-MA1-081-019		SH,FUN
37	84-MA1-201-019		KEY,FN

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
38	82-NF5-212-019		GUIDE,FL
39	84-MA1-006-019		PANEL,CD
40	84-MA1-215-019		HLDR,CD R
41	84-MA1-214-019		HLDR,CD L
42	83-NF5-034-019		IND,CD 2
43	83-NF5-023-019		IND,CD
44	83-NF5-021-019		WINDOW,TOP
45	84-MA1-008-019		CAB,STEEL<EXCEPT Z>
45	84-MA1-007-018		CAB,STEEL(G)<Z>
46	84-MA1-084-019		PANEL,REAR EEBNM<EE>
46	84-MA1-085-019		PANEL,REAR EZBNM<EZ,EEZ>
46	84-MA1-009-019		PANEL,REAR HEJBN<HE>
46	84-MA1-083-019		PANEL,REAR KBNM<K>
46	84-MA1-090-019		PANEL,REAR LHBNM<LH>
46	84-MA1-016-019		PANEL,REAR ZBNE<Z>
47	87-085-224-010		FOOT,H17
48	87-085-184-010		BUSHING,AC CORD D<LH>
48	87-085-185-010		BUSHING,AC CORD E<EXCEPT LH>
⚠ 49	87-050-016-018		AC CORD ASSY E<Z>
⚠ 49	87-050-079-019		AC CORD ASSY,E<HE,EE,EZ,EEZ>
⚠ 49	87-050-075-019		AC CORD ASSY,H<LH>
⚠ 49	87-050-032-019		AC CORD ASSY,K'3P S<K>
50	84-MA1-040-019		KEY,CURSOR
51	84-MA1-027-019		KEY,ECHO
52	87-020-109-010		LED,SLF-201C
A	87-067-703-019		BVT2+3-10(W/O SLOT)
B	81-MK1-210-019		S-SCREW,BFT2+3-16
C	87-571-032-419		VT2+3-6
D	87-591-094-419		QIT+3-6 GOLD
E	87-067-584-019		BVT2+3-6 W/O SLOT
F	87-067-585-019		BVTT+4-6
G	87-067-579-019		BVT2+3-8 W/O SLOT
H	87-067-581-019		BVT2+3-15 W/O SLOT
I	87-741-094-419		UT2+3-6
J	87-067-641-019		UTT2+3-8 W/O SLOT BLK
K	87-067-058-019		FW,3.2-8-0.5

MECHANICAL EXPLODED VIEW 2 / 2

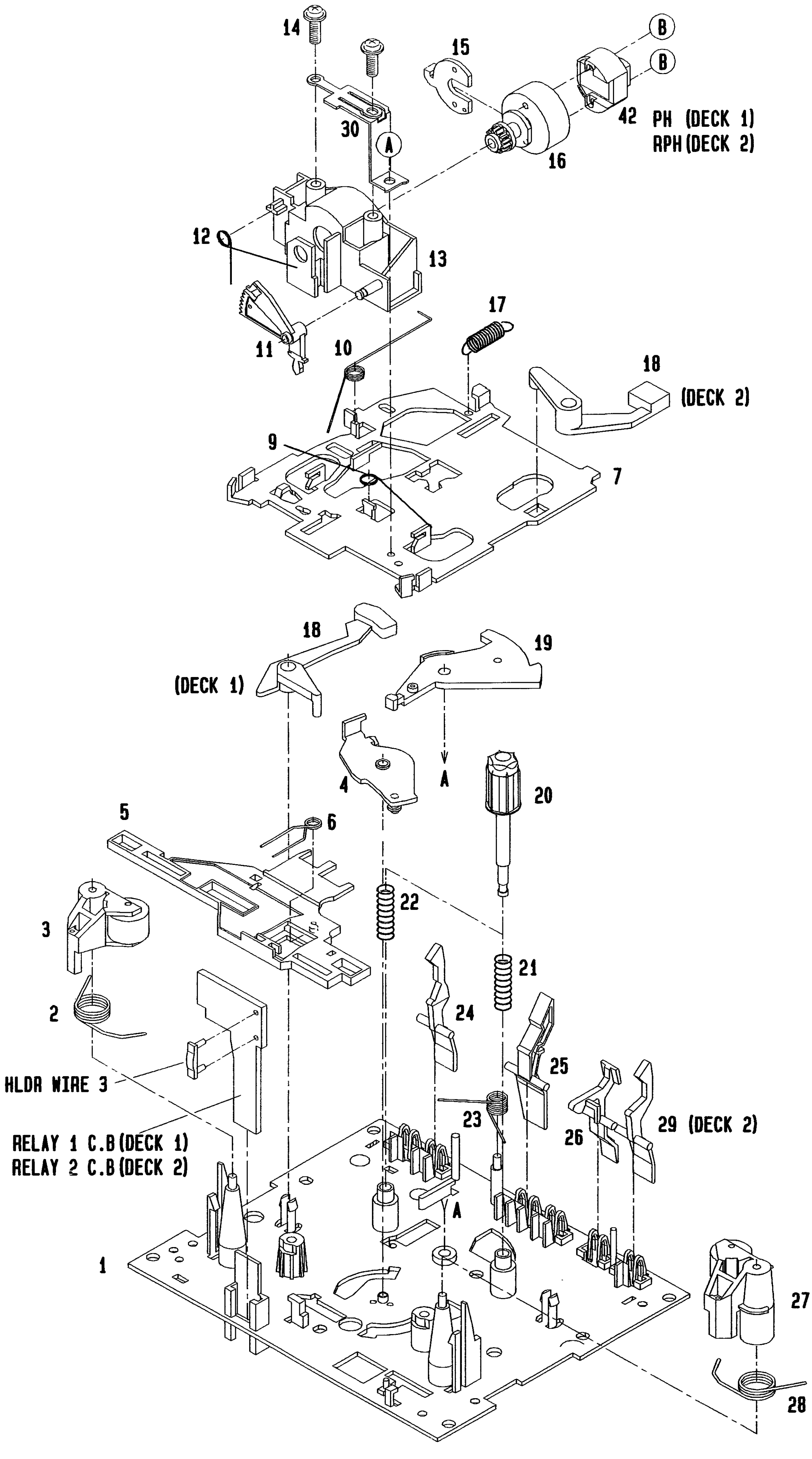


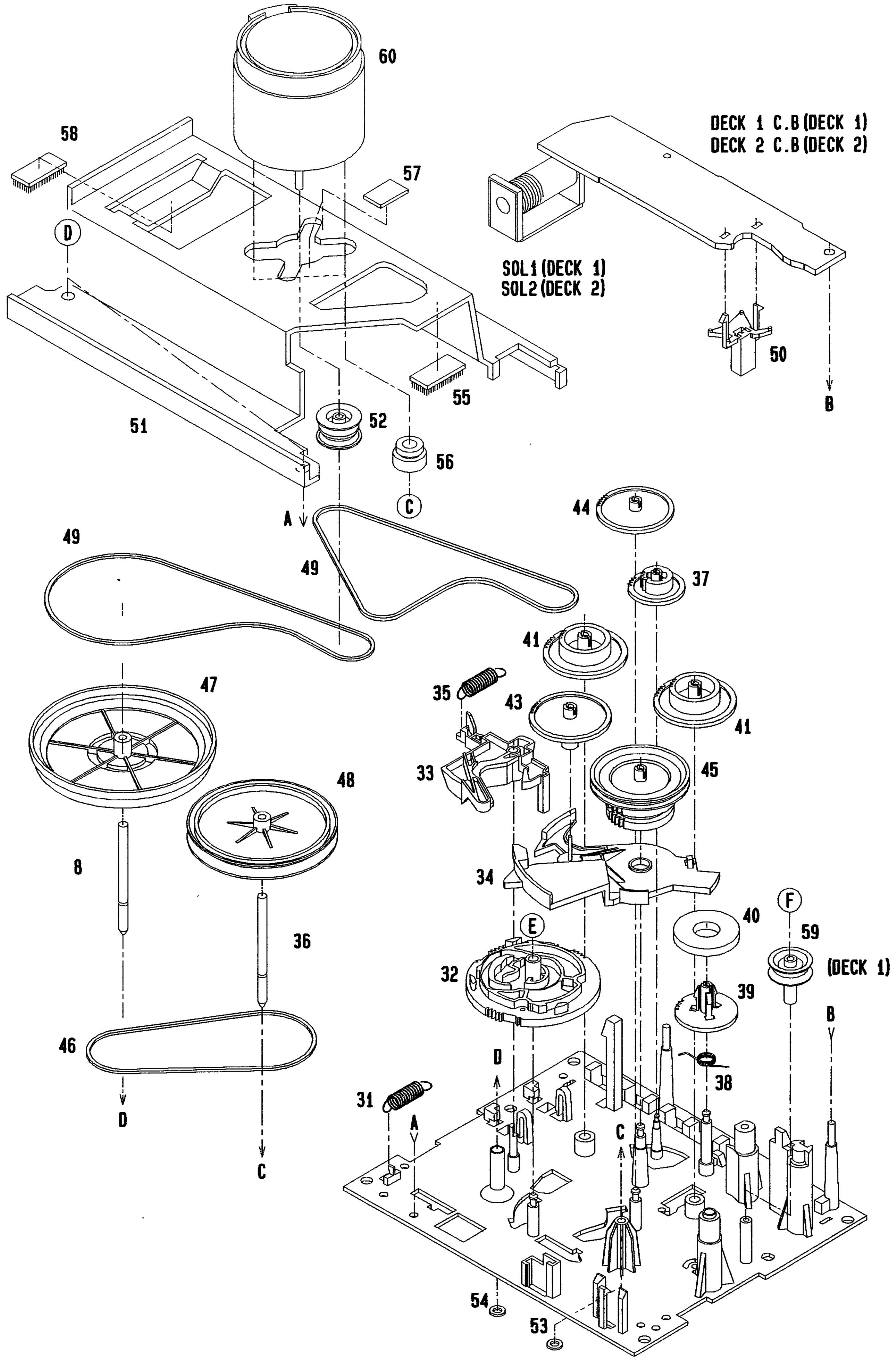
MECHANICAL PARTS LIST 2 / 2

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	DESCRIPTION
1	80-CD3-214-010	CUSH CD A
2	81-ZG1-277-110	HLDR,MAGNET N
3	81-ZG1-253-510	HLDR,MECH MK2
4	81-ZG1-276-110	WORM GEAR,TT NO2
5	81-ZG1-230-010	G-CUSH,MECH
6	81-ZG1-231-110	SPR-C,MECH
7	81-ZG1-212-010	PULLY,LOAD MO
8	81-ZG1-250-010	GEAR,TRAY RELAY MK2
9	81-ZG1-019-010	GEAR TRAY B YEL
10	81-ZG1-018-010	GEAR TRAY A YEL
11	81-ZG1-017-010	GEAR RELAY RED
12	81-ZG1-014-010	PULLY,RELAY YEL
13	81-ZG1-240-010	SPR-P,WORM
14	87-036-326-010	MAGNET,CLAMPER 93
15	81-ZG1-285-010	PLATE,MAGNET N
16	81-ZG1-232-010	BELT,TRAY
17	81-ZG1-238-110	CUSH,TRAY IN
18	81-ZG1-222-010	WORM WHEEL,TT
19	81-ZG1-202-010	GEAR,MAIN
20	81-ZG1-252-010	LEVER,TT MK2
21	81-ZG1-008-210	TURNTABLE,NO2<Z>
21	81-ZG1-010-210	TURNTABLE,NO3<EXCEPT Z>
22	81-ZG1-020-010	PLATE,CAM BGE
23	81-ZG1-262-010	SPR-E CAM S
24	81-ZG1-016-010	GEAR,MECHA BGE
25	81-ZG1-024-010	TRAY,NO3 3NF-5
26	81-ZG1-015-010	GEAR,TRAY BLU
27	81-ZG1-233-110	BELT,TT
28	81-ZG1-236-010	PULLY,TT MO
29	81-ZG1-260-010	SHAFT,WORM S
A	81-653-215-010	SPECIAL SCREW VT2
B	81-ZG1-254-010	S-SCEW,MECH HLDR
C	81-ZG1-271-010	S-SCREW,MECH REAR
D	81-ZG1-239-010	S-SCREW,TT
E	87-067-945-110	VFT2+3-12(F10)
F	87-251-071-410	U+2.6-4
G	87-067-579-010	BVT 2+3-8 W/O SLOT
H	81-ZG1-264-010	S-SCREW,CAM
I	87-761-095-410	VFT2+3-8W/O SLOT GOLD
J	87-078-029-010	VFT2+3-13(F8)
K	87-078-061-010	VFT2+3-20DIA10,GLD

TAPE MECHANISM EXPLODED VIEW 1 / 1



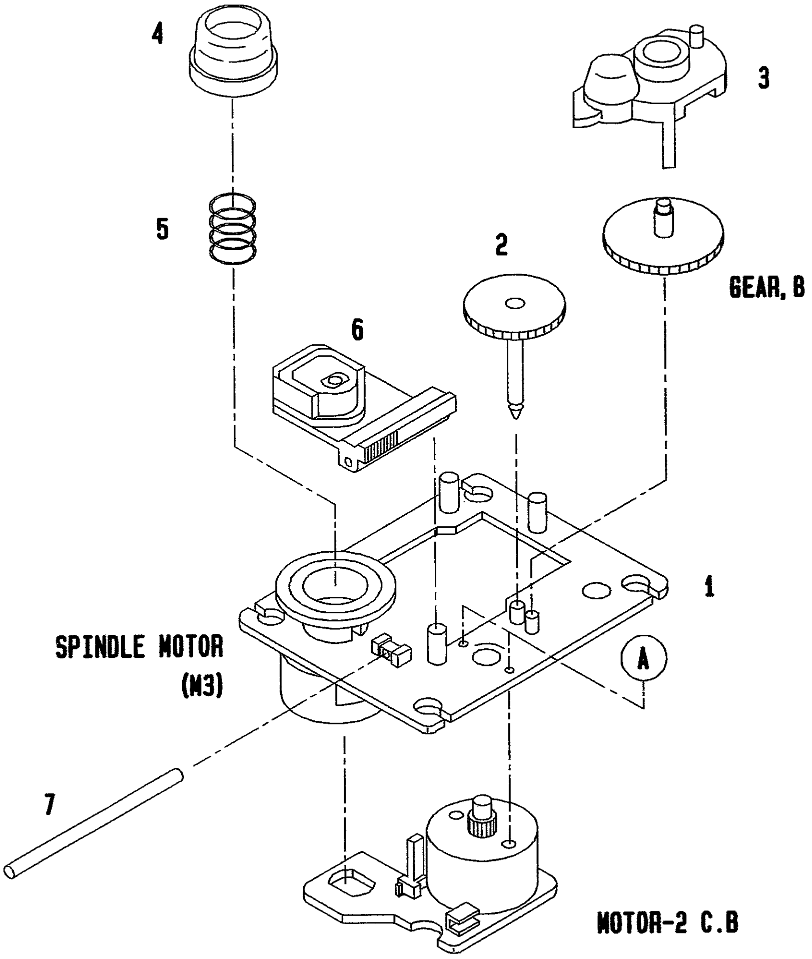

DECK 1 C.B (DECK 1)
DECK 2 C.B (DECK 2)
D
SOL1 (DECK 1)
SOL2 (DECK 2)
B
C
A
F
E
(DECK 1)
B
D
A
C
D
C

TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM1-327-119		CHAS ASSY R (DECK 2)
1	82-ZM3-217-119		CHAS ASSY,P (DECK 1)
2	82-ZM1-258-010		SPR-T,PINCH L
3	82-ZM1-248-11K		LVR ASSY,PINCH L
4	82-ZM1-295-21K		PLATE ASSY,LINK
5	82-ZM1-266-01K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-21K		CHAS,HEAD
8	82-ZM1-312-019		CAPSTAN 2.2-41.7
9	82-ZM1-269-010		SPR-T,BRG
10	82-ZM1-219-010		SPR-T,LINK
11	82-ZM1-210-01K		GEAR,H T
12	82-ZM1-213-010		SPR-T,HEAD
13	82-ZM1-207-010		GUIDE,TAPE
14	82-ZM1-283-210		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-010		HLDR,HEAD
17	82-ZM1-218-010		SPR-E,HB
18	82-ZM1-263-11K		LVR,EJECT L (DECK 1)
18	82-ZM1-264-01K		LVR,EJECT R (DECK 2)
19	82-ZM1-222-01K		LVR,PLAY
20	82-ZM1-217-11K		REEL TABLE
21	82-ZM1-244-110		SPR-C,BT
22	82-ZM1-285-110		SPR-C,BTL
23	82-ZM1-257-010		SPR-T,CAS
24	82-ZM1-241-11K		LVR,MC
25	82-ZM1-242-01K		LVR,CAS
26	82-ZM1-243-01K		LVR,STOP
27	82-ZM1-253-11K		LVR ASSY,PINCH R
28	82-ZM1-259-010		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
30	82-ZM1-298-010		SPR-P EARTH
31	82-ZM1-255-110		SPR-E,LVR DIR
32	82-ZM1-221-11K		GEAR,CAM
33	82-ZM1-227-11K		LVR,TRIG
34	82-ZM1-224-11K		LVR,FR
35	82-ZM1-265-119		SPR-E,TRIG
36	82-ZM1-313-019		CAPSTAN,N 2-41.5
37	82-ZM1-223-01K		GEAR,PLAY
38	82-ZM1-256-110		SPR-T,FR
39	82-ZM1-220-21K		GEAR,IDLER
40	80-ZM6-316-010		RING MAGNET 3
41	82-ZM1-216-21K		GEAR,REEL
42	87-046-355-019		HEAD,PH HADKH2529B (PH)
42	87-046-356-019		HEAD,RPH HADKH5581B (RPH)
43	82-ZM1-225-01K		GEAR,FR
44	82-ZM1-226-01K		GEAR,REW
45	82-ZM1-228-210		SLIP DISK ASSY
46	82-ZM1-328-010		BELT,FR 2
47	82-ZM1-238-51K		FLY-WHL,R (DECK 2)
47	82-ZM3-210-41K		FLY-WHL,R2 (DECK 1)
48	82-ZM1-235-21K		FLY-WHL,L (DECK 2)
48	82-ZM3-208-31K		FLY-WHL,L2 (DECK 1)
49	82-ZM5-202-010		BELT,MAIN 9
50	82-ZM1-245-21K		HLDR,IC
51	82-ZM5-201-01K		HLDR,200
52	82-ZM3-202-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH 1.75-3.6-0.5 SLT
55	80-ZM6-230-019		SH BELT
56	82-ZM1-308-019		CUSH-G,DIA3.7-9-3.2
57	86-575-361-010		CUSH-G,6-8-0.8
58	81-ZM3-204-019		SH,BELT 2
59	82-ZM3-204-010		PULLEY,COUPLER (DECK 1)
60	87-045-347-019		MOT,SHU2L 70 (M1)
A	82-ZM1-315-010		S-SCREW,GUIDE TAPE
B	80-ZM6-207-019		V+1.6-7
C	82-ZM1-309-010		S-SCREW MOTOR
D	87-067-178-019		VTT+2.6-3
E	87-067-932-019		PW,2.15-6.8-0.5 SLT
F	87-067-972-019		PW,1.05-3-0.25 SLT

CD MECHANISM EXPLODED VIEW 1 / 1



CD MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	9X-262-513-310		T.T CHASS ASSY W/MOTOR
2	92-625-188-020		GEAR(A)
3	92-625-544-010		COVER
4	92-625-187-010		RING CENTER
5	92-625-191-010		SPRING COMPRESSION
6	98-848-127-110		OPTICAL PICK UP KSS-210A
7	94-917-565-010		SHAFT SLED
A	87-261-032-210		V+2-3

SPEAKER LIST (SX-FZ1200 / FZAP1)

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	84-MS3-001-019		PANEL FR
2	84-MS3-008-019		ADAPTOR ASSY
3	84-MS3-005-019		SPEAKER GRILL
4	84-VS3-601-019		SPEAKER WOOFER H <G,LH>
4	82-VS3-601-019		SPEAKER WOOFER <Z>
5	83-NS5-604-019		SPEAKER MID
6	83-NS5-606-019		SPEAKER
7	83-MS3-009-019		GRILL FRAME ASSY
8	83-NS5-611-019		SPEAKER CORD Y/B
9	83-NS5-612-019		TERMINAL Y/B
10	84-MS3-611-019		SPEAKER CORD ASSY

SPEAKER LIST (SX-Z1100)

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	84-MS1-001-019		PANEL FR
2	84-MS1-010-019		GRILL FRAME ASSY
3	84-MS3-009-019		PANEL TW ASSY
4	82-VS3-601-019		SPEAKER WOOFER
5	84-VS3-603-019		SPEAKER TWEETER
6	83-096-614-019		SPEAKER CORD

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	84-MA1-701-019		RC-TZ1100
2	87-006-268-019		AN-LOOP ANT NC (UN)
3	87-009-724-019		PLUG,ADPTR,IR39 <LH>
3	87-009-725-019		PLUG,ADPTR IR40 <HE>
4	87-043-106-019		FM,WIRE ANT(Z) <EE,K,EZ,Z>
5	87-043-115-018		ANT,FEEDER FM<EXCEPT EE,K,EZ,Z>
6	84-MA1-901-019		IB,ESC <EXCEPT LH,ZAP1>
7	84-MA1-905-019		IB,GFI <EE,EZ>
8	84-MA1-906-018		IB,API <ZAP1>
9	84-MA1-907-019		IB,LH <LH>

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, SERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
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Tokyo Japan

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